

# DePaul University Digital Commons@DePaul

**CDM Annual Reports** 

Jarvis College of Computing and Digital Media

2017

#### Annual Report 2016-2017

DePaul University College of Computing and Digital Media

Follow this and additional works at: https://via.library.depaul.edu/cdmannual

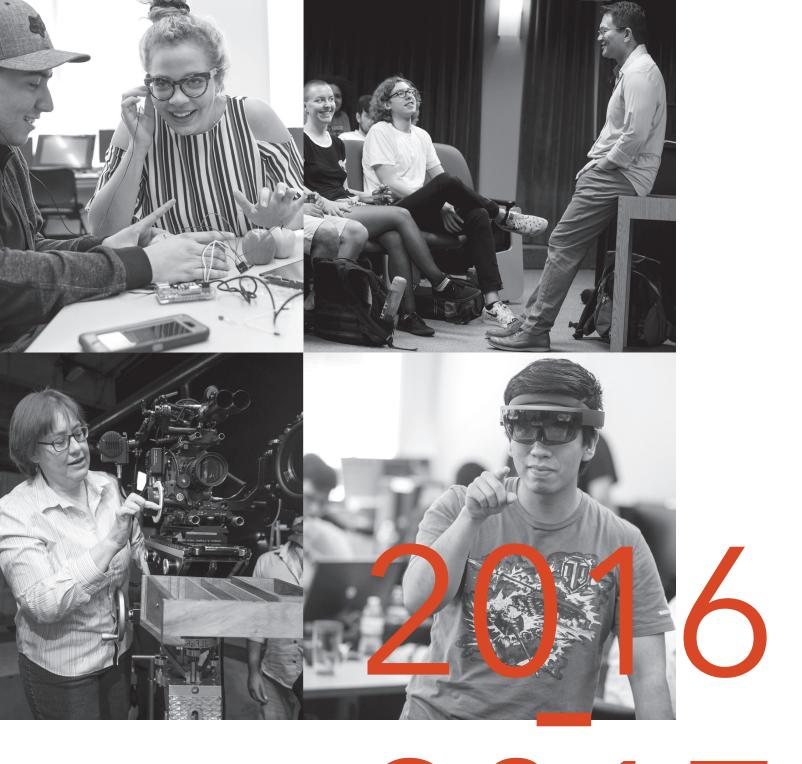
Part of the Computer and Systems Architecture Commons, Data Storage Systems Commons, and the Digital Communications and Networking Commons

#### **Recommended Citation**

DePaul University College of Computing and Digital Media, "Annual Report 2016-2017" (2017). *CDM Annual Reports*. 5.

https://via.library.depaul.edu/cdmannual/5

This Book is brought to you for free and open access by the Jarvis College of Computing and Digital Media at Digital Commons@DePaul. It has been accepted for inclusion in CDM Annual Reports by an authorized administrator of Digital Commons@DePaul. For more information, please contact digitalservices@depaul.edu.



# 2017



ANNUAL REPORT

#### TABLE of CONTENTS

```
Letter from the Dean pg 3
Who We Are pg 4
CDM by the Numbers pg 5
Enrollments and Retention pg 7
New Faculty and Programs pg 8
School of Cinematic Arts pg 10
School of Design pg 12
School of Computing pg 14
Supporting the Mission pg 17
Chicago Connections pg 18
International Reach pg 20
Faculty Grants pg 22
Faculty Publications pg 26
Faculty Screenings and Film Recognition pg 33
Faculty Exhibitions and Demos pg 38
Student Accomplishments pg 40
Alumni Recognition pg 41
Visiting Speaker Series pg 42
CDM in the News pg 46
2017 - 2018 Preview pg 48
```

#### LETTER from the DEAN



The College of Computing and Digital Media has always prided itself on curriculum, creative work, and research that stays current with changes in our various fields of instruction. As we looked back on our 2016-17 academic year, the need to chronicle the breadth and excellence of this work became clear. We are pleased to share with you this annual report, our first, highlighting our accomplishments.

Last year, we began offering three new graduate programs and two new certificate programs. We also planned six degree programs and three new certificate programs for implementation in the current academic year. CDM faculty were published more than 100 times, had their films screened more than 200 times, and participated in over two dozen exhibitions. Our students were recognized for their scholarly and creative work, and our alumni accomplished amazing things, from winning a Student Academy Award to receiving a Pulitzer. We are proud of all the work we have done together.

One notable priority for us in 2016-17 was creating and strengthening relationships with industry—including expanding our footprint at Cinespace and developing the iD Lab—as well as with the community, through partnerships with the Chicago Housing Authority, Wabash Lights, and other nonprofit organizations.

We look forward to continuing to provide innovative programs and spaces this academic year. Two areas in particular we've been watching closely are makerspaces and the "internet of things." We've already made significant commitments to these areas through the creation of our 4,500 square foot makerspace, the Idea Realization Lab, and our new cyber-physical systems bachelor's program and lab.

We are excited to continue providing the opportunities, curriculum, and facilities to support our remarkable students.

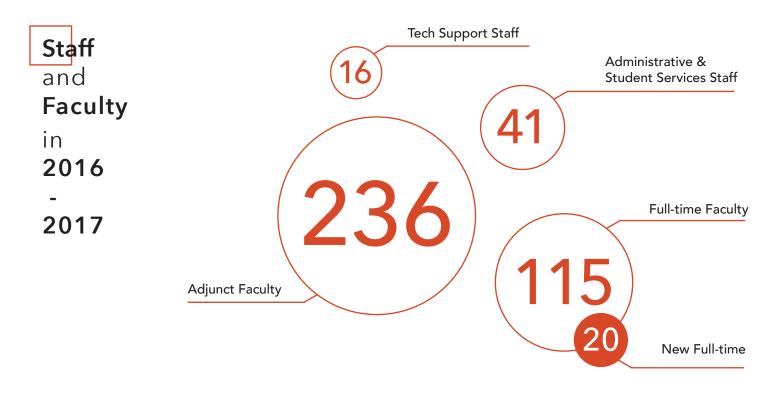
David Miller, Dean

# WHO WE ARE

#### **The College of Computing and Digital Media** is

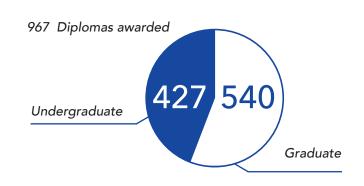
dedicated to providing students an innovative edge in today's computing, design and cinema fields. We are a diverse group of notable and award-winning faculty, students, and programs, with specialized areas of expertise that are nationally and internationally recognized. Our curriculum is reflective and responsive to the latest industry trends, technologies, and ideas across the computing and digital media spectrum. Our programs provide real-world experience and global perspectives through national and international opportunities, enabling students and faculty to keep pace with leaders in their field. Chicago is our engine for creation where students can leverage the resources of the city and our broad alumni network to launch careers that have impact and influence. Whether it's computing, design, or cinema, we believe in the power of innovation and know it is at the heart of our students' success.

#### BY the NUMBERS











#### BY the NUMBERS continued

#### DIGITAL MEDIA

15% SOCIAL MEDIA GROWTH from 2015-16



2.5M+

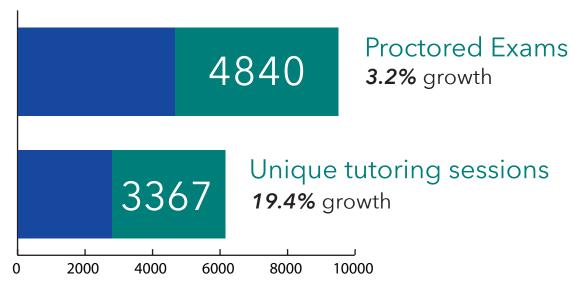
**40.5%** new visitor

WEBPAGE VIEWS

**59.5%** returning



#### **EXAMS & TUTORING SESSIONS**

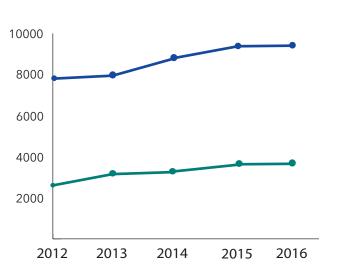


#### 2016 - 2017 Annual Report **pg** 6

#### **ENROLLMENTS**

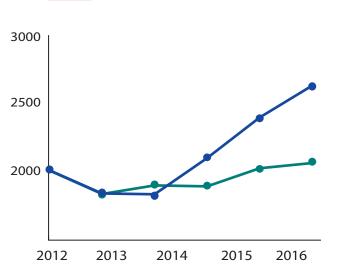
The College of Computing and Digital Media continues to show growth in both enrollments and headcount.

#### **Total Enrollments**



Enrollments in have *increased 26%* from Fall Quarter 2012 to Fall Quarter 2016, with **undergraduate** showing a **21%** *increase* and **graduate** showing a **41%** *increase*.

#### Total Headcount



Head count *increased 28%* from Fall Quarter 2012 to Fall Quarter 2016, with **undergraduate** showing a *43% increase* and **graduate** showing a *12.5% increase*.

#### RETENTION & OUTCOMES

#### **1st Year Retention**

2012	88%
2013	89%
2014	89%
2015	86%
2016	89%

#### 4 Year Graduation

20	12	54%
20	13	55%
20	14	57%
20	15	56%
20	16	60%

#### Career Outcomes

Undergraduate: 87% (82% employed, 4% continuing ed, 1% not seeking)

Graduate: 94% (92% employed, 2% continuing ed, 1% not seeking)



**Brian Andrews** School of Cinematic Arts Assistant Professor in Visual Effects and Compositing



Ann Hozian School of Cinematic Arts Assistant Professor in Screenwriting



Alireza Khatami School of Cinematic Arts Assistant Professor in Film and Television Production



Dan Klein School of Cinematic Arts Assistant Professor in Film and Television Production



Dana Kupper School of Cinematic Arts Professional Lecturer in Cinematography



**Scott Myers** School of Cinematic Arts Assistant Professor in Screenwriting



Anuradha Rana School of Cinematic Arts Assistant Professor in Documentary Production



Kahra Scott-James School of Cinematic Arts Assistant Professor in Sound



Susanne Suffredin School of Cinematic Arts Professional Lecturer in Editing



**Anna Anthropy** School of Design Game Designer in Residence



Denise Nacu School of Design Assistant Professor in Experience Design



B Rich School of Design Assistant Professor in Digital Communication and Media Arts



Adam Trowbridge School of Design Assistant Professor in Interactive and Social Media



Jessica Westbrook School of Design Associate Professor in Graphic Design



James DeBettencourt School of Computing Professional Lecturer in Information Technology



Mary Jo Davidson School of Computing Professional Lecturer in General Computer Science Education



Tanu Malik School of Computing Assistant Professor in Databases and Big Data



Yosef Mendelson School of Computing Professional Lecturer in Information Technology



Hamed Qahri-Saremi School of Computing Assistant Professor in Information Systems



Filipo Sharevski School of Computing Assistant Professor in Networking and Security

# CDM PROGRAMS

#### Undergraduate

Animation BA/BFA Computer Science BS Cyber-Physical Systems BS\* Cybersecurity **BS** Data Science BS\* Film and Television BA/BFA Game Design BS Game Programming BS Graphic Design BFA Information Systems BS Information Technology BS Interactive and Social Media BS Math and Computer Science BS Network Engineering and Security BS

#### Graduate

Animation MAIMFA Applied Technology MS Business Information Technology MS Computational Finance MS Computer Science MS Creative Producing MFA (Joint with Kellstadt Graduate School of Business)\* Cybersecurity MS Digital Communication and Media Arts MA (Joint with College of Communication)

Documentary *MFA* E-Commerce Technology *MS* Experience Design MA Film and Television MS/MFA Game Design MFA\* Game Programming MS Health Informatics MS Human-Computer Interaction MS Information Systems MS IT Project Management MS Network Engineering and Security MS Predictive Analytics MS Product Innovation and Computing MS (Joint with Kellstadt Graduate School of Business)\* Screenwriting *MFA* Software Engineering MS

#### PhD

Computer and Information Sciences Human Centered Design\*

\* Indicates new in 2017-2018

#### New in 2016 -2017

**School of Cinematic Arts** Documentary MFA

**School of Design** Experience Design MA

**Institute for Professional Development** Modern Information Technology Technology and Innovation

#### Institute For Professional **Development (IPD)** Certificates

Advanced SQL

Big Data and NoSQL Big Data Using Hadoop Big Data Using Spark\* Cloud Computing Technologies Data Science for Business Introduction to SQL\* IPv6 Java Developer Modern Information Technology Modern .NET Web Development\* SQL Server Business Intelligence **SQL** Server Database Administration Technology and Innovation Web Development with JavaScript and HTML5

## SCHOOL of

# CINEMATIC ARTS

# Note from the **Director**

Since its inception, the School of Cinematic Arts has been dedicated to training the next generation of visual storytellers. When the program started, we asked ourselves a series of questions: If we were going to school today, what would we want that school to look like? What courses would be taught? What equipment and facilities would we have? The goal was to create a truly innovative film school for the 21st century. Our accomplishments this past year are the latest answers to these questions in our quest to offer the best film education possible to our students.



Gary Novak
Director, School of
Cinematic Arts

# Program Recognition

DePaul was included in *Variety's* list of Stellar Film Schools in 2017.

*MovieMaker Magazine* listed DePaul as one of their top film schools, highlighting us in the "top-notch equipment and facilities" category.

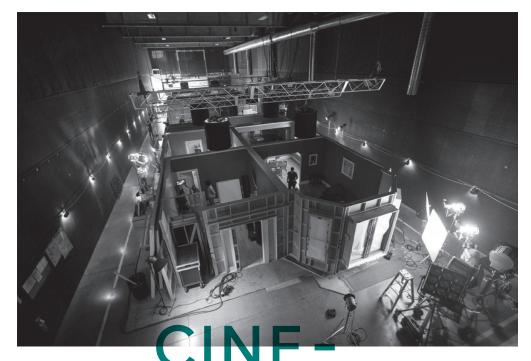
*The Wrap* ranked our School of Cinematic Arts #29 on their list of the 50 top film schools.

# Curriculum Updates —

Our new (2016-17) MFA in Documentary, accepted as one of DePaul's mission-resonant graduate programs, prepares future documentary filmmakers by providing a foundation in documentary history, traditions, storytelling and production techniques, as well as innovative and emerging styles and techniques of transmedia and interactive documentaries. Social justice is inherent to documentary filmmaking and the Vincentian emphasis on ethics is central to the curriculum.

We renamed and revised our BA in Digital Cinema to a BA in Film & Television and our BS in Digital Cinema to a BFA in Film and Television (where all concentrations from the BA degree were moved). The BA is our generalist degree, where students can obtain a more liberal arts-oriented education with broad exposure to all areas of film and television production while the BFA allows students to specialize in specific film and television areas and create portfolios to better prepare them for careers in these areas.

LA Quarter, the program allowing students the unique opportunity to experience the inner workings of Hollywood first hand, is now offered in the fall, winter, and spring quarters. The offices have moved to a larger facility, and students now take classes on the Sunset Gower Studio lot. Sunset Gower Studios, formerly the headquarters of Columbia Pictures, is one of the largest independent media and entertainment properties in the United States.



SPACE

This past year, due to tremendous growth of the cinema program, the School expanded its footprint at *Cinespace* to over 32,000 square feet (previously 20,000 square feet), adding two stages, two editing studios, an advanced camera checkout facility, classrooms, and offices. The space also has a 30'x40' cyclorama (one of the largest green screens in the Midwest). The new stage setups, in addition to our existing stage, provide 16 total slots for production classes. Nearly all of our production classes are now held at Cinespace.

#### Faculty Recognition

Savvas Paritsis was **promoted** to Associate Professor.

Anchor Baby, the script written by Assistant Professor Anna Hozian and one of the few scripts chosen for the inaugural year of Meryl Streep's Screenwriting Lab, has been acquired by Lynmar Entertainment and is being packaged for production.

Assistant Professor Dan Klein wrote the film *It's Just a Gun*, which won silver in the narrative category of the Student Academy Awards.

Two of our faculty members
- Assistant Professor Shayna
Connelly and Professional Lecturer
Dana Kupper - were listed in
Newcity's 2016 Film 50: Chicago's
Screen Gems.

Dana Kupper was the Director of Photography on *Life Itself*, which was nominated for a Best Documentary Emmy.

Count Me In, edited by Professional Lecturer Susanne Sufferedin, aired nationally on PBS.

Instructor and alum James Choi's MFA thesis film *Empty Space* has earned theatrical release in Korea and will also be distributed on national television there.

Associate Professor Meghann Artes received DePaul's *Spirit of Inquiry* award.

### SCHOOL of

## DESIGN

# Note from the **Director**

The School of Design is a consciously diverse faculty from multiple design fields offering a learning environment that nurtures new kinds of designers: flexible, interdisciplinary, and trained as collaborative problem seekers, solvers and researchers. Graduates are capable of integrating existing and cutting-edge technologies and social practices developing visualizations, games, apps, products, processes, and experiences that positively impact society. Our students are passionate, agile, selfreflective, and ready to work. We are critically engaged in identifying and solving problems on individual, community, national, and international levels in the world that can produce meaningful innovation.



Dolores Wilber
Director, School
of Design

# Program Recognition

DePaul was ranked #10 among graduate programs and #18 among undergraduate programs in *The Princeton Review's* Top Schools to Study Game Design in 2017.

Animation Career Review rated our game design program #1 in the Midwest and #11 nationally.

# Curriculum & Program Updates ———

The new (2016-17) MA in Experience Design addresses the growing demand for professionals with a combination of skills to effectively design processes, services, events, and environments, with a focus placed on the quality of user experience and culturally relevant solutions.

We began offering a Designing for Physical Technology minor in 2016-17. The minor provides the opportunity to integrate hardware with software and design digital fabrication tools, clothing, robotics, and interconnected objects.

Game design, previously a concentration, was elevated to a freestanding BS degree.

In Spring 2016 we funded a *Design Impact Project Series* where students could pitch their plan to imagine, develop, and deploy cutting-edge visual and interactive designs that positively impact individuals and communities using emerging social practices, technologies, and entrepreneurial thinking. Winners received advising support, workspace, and stipends ranging from \$500-\$5000.

Our new *Divergent Design Lab* is a research and design lab focused on interface, play, collaboration, and distribution. The Lab uses critical design to decode value systems and encode underrepresented ideas, produce interactive experiences through emerging media practices, and host quests/workshops.



# INVESTIGATING THE USE OF INFORMATION & COMMUNICATION TECHNOLOGIES IN SUPPORTING VIOLENCE INTERRUPTION

This year, Assistant Professor Sheena Erete was awarded a \$150,000 grant from the National Science Foundation for the project "Investigating the Use of Information and Communication Technologies in Supporting Violence Interruption." Dr. Erete and her students in CDM's Technology for Social Good Research and Design Lab (http://tsg.cdm.depaul.edu) are partnering with Cure Violence to design and develop a mobile application that uses predictive analytics techniques to provide violence interruption workers with the most effective intervention strategies based on data from over a decade of prior inventions. Dr. Erete will deploy the mobile application in several Chicago communities that experience high violence.

#### Faculty Recognition

Doris Rusch and Brian Shrank were promoted to Associate Professor.

Game Designer in Residence Anna Anthropy was an honoree at the 2017 *Video Game Art Gallery's* HARDCORE/CASUAL benefit party in September. She received their Global Illumination Award.

Assistant Professor Sheena Erete was awarded a Best Paper Award for "Empowered Participation: How Citizens Use Technology to Leverage their Political Power" at SIGCHI2017, ranking her paper in the top 1% of over 2,400 submissions.

Instructor Jay Margalus was invited to the *White House Nation of Makers Fair* in August to meet with a group of other makerspace organizers throughout the nation.

Professor Nichole Pinkard was invited to and participated in the *White House's CS4All State Convention* focused on designing STEM environments for youth. Pinkard was also named a Pahara-Aspen Education Fellow. The fellowships are awarded to diverse and innovative leaders who are reimagining America's public schools.

Associate Professor Doris Rusch gave the TEDx talk "Why Game Designers are Better Lovers" about deep games, which tackle salient aspects of the human experience.

Associate Professor Brian Schrank received DePaul's *Excellence in Teaching* award.

Associate Professor Doris Rusch was on a "Social Impact Gaming" panel at the Chicago Comic and Entertainment Expo of Chicago (C2E2), hosted by the Chicago Public Library.

Associate Professor Jessica Westbrook and Assistant Professor Adam Trowbridge were invited to speak on a "*Critical Agency Now!*" panel at Foundations in Art: Theory and Education.

## SCHOOL of

# COMPUTING

# Note from the Director

The School of Computing is a vibrant community in which committed faculty educate students at the undergraduate and graduate level in a broad range of technology disciplines, including computer science, information systems, data science, networking, cybersecurity, human-computer interaction, and software engineering. The School is also a research laboratory, in which faculty research medical and health informatics, recommenders systems, innovation, data analytics, and American Sign Language. We are proud of our community: faculty, students and alumni, and invite you to get involved.



Jacob Furst
Director, School
of Computing

# Curriculum Updates —

Game Programming, previously a concentration, was elevated to a freestanding BS degree.

We changed the names of our BS in Information Assurance and Security Engineering and MS in Computer, Information, and Network Security to a BS and MS in Cybersecurity, respectively. The name change reflects the current industry terminology and more accurately describes the curriculum.

# Partnerships and Events

The School of Computing is partnering with the *National Center for Women & Information Technology (NCWIT)* as a Change Leader in the NSF-funded Learning Circles Project. The purpose of the project is to use evidence-based practices and methods for recruiting and retaining women.

We completed our second year of sponsoring a *Girls Who Code* club. Undergraduate and graduate CDM students volunteer to work with the middle and high school girls in the club.

In May, we held a *BioMedical and Health Informatics Workshop*, celebrating research by students, faculty, and practitioners.

MS in Predictive Analytics students were invited to present their capstone projects at the *Chicago City Data Users Meetup* held in May at the Microsoft Technology Center in Chicago.

We hosted *Google's Applied CS for Android* program, a 6-Saturday workshop, in October at CDM.

**Bosch Day** at DePaul took place in September. Events included a hackathon, project management leadership workshop, and a 3D printer stand and demo.

We partnered with SAP for a *CodeJam*, giving students access to tools, sandboxes, and interactive time with experts in SAP Cloud Platform.

#### Faculty Recognition

Amber Settle was elected Chair of the **SIGCSE** board. She was also promoted to Professor.

Associate Professor Andre Berthiaume received DePaul's *Gerald Paetsch Academic Advising Award*.

Professor Xiaowen Fang received a Best
Paper Award for "A Lexical Analysis of Online
Reviews of Social Media Applications" from the
Information and Communication Technologies in
Organizations and Society.

Professor Rosalee Wolfe was awarded an academy fellowship at the University of Hamburg to engage in research on the Academy's long-term project "Development of a corpus-based electronic dictionary of German Sign Language."

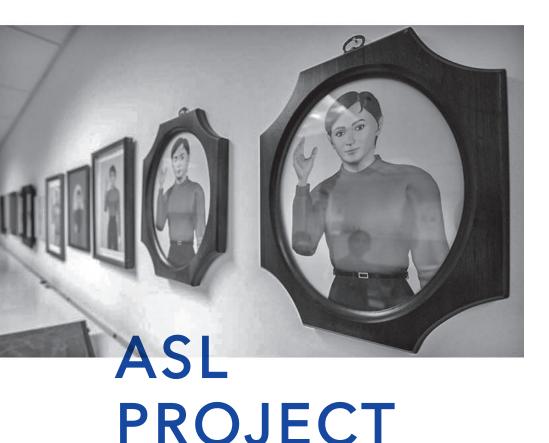
Professor Radha Jagadeesan was part of a team that won the 2017 *Alonzo Church Award* for Outstanding Contributions to Logic and Computation for providing a fully-abstract semantics for higher-order computation through the introduction of game models, thereby fundamentally revolutionizing the field of programming language semantics, and for the applied impact of these models.

Associate Dean Theresa Steinbach and Professor Amber Settle piloted a *linked-course learning community* in the fall of 2014, which included freshman women pursuing tech degrees and men of color. The results showed that students who took courses in a community with the same group had retention rates higher than 4 of the 5 comparison groups, and none went on academic probation.

# SoC Leadership Council

Thank you to the dedicated service of the *School* of *Computing Leadership Council*, which donated and raised over \$30,000 in scholarships for CDM students. We also welcome two new members on the council this year.

LoriLee Bielski
Jim Bowler
Diane Brown
Michael Carioscio
Larry Cecil (new member)
John Fisher
Jordan Gary (student member)
Lily Gulik
Matt Laboe
Mary Anne Luczak (council chair)
Laurel McGrath
Dan O'Mahoney (new member)
David Offutt



The American Sign Language Project at DePaul University has been in the works for 15 years. Led by Professor Rosalee Wolfe, the project combines computer technology and linguistics research to bridge the communication gap between the deaf and hearing worlds using an English-to-ASL avatar translator.

Currently, the focus is on automating the portrayal of linguistic processes that are missing from avatar systems. Much of the information in a signed sentence can be lost without careful attention to the subtleties of movement.

The team is exploring the possibilities of utilizing the "Paula" avatar for other sign languages. Dr. John McDonald, Associate Professor and a senior researcher on the project, has been invited to spend the fall term at Laboratoire d'Informatique pour la Mécanique et les Sciences de l'Ingénieur (LIMSI) in Orsay, France where he will collaborate with researchers who are investigating parallel questions in LSF (Friench Sign Language).

#### Learn more:

ASL Project: http://asl.cs.depaul.edu/

"Chicago Tonight" Interview: https://goo.gl/hfFf2N

How Movie Magic Could Help Translate for Deaf Students: https://goo.gl/79zjpu

# SUPPORTING the MISSION

School of Cinematic Arts students are collaborating with *NBC Universal* on the project "Local Film Storytelling Project", a series of five webisodes that will feature the stories, ideas, and projects of local social change makers who are driving economic development, helping solve community issues, and igniting passion around social issues through their ventures.

SCA Faculty (James Choi, Lili Calfee, JoAnne Zielinski) worked with the *Vincentian Mission Institute Cohort* 4 to create a video ("New Employee Vincentian Mission") to onboard new faculty and staff during orientation.

Students in DC 371 produced videos for *letitbeus.org*, a nonprofit dedicated to the adoption and education of children in the Illinois foster care system.

Three graduate HCl students developed *DePaul Hero*, a mobile app prototype designed to take users through the Office of Mission and Values' "Traditions Tour" given each summer to incoming students.

CDM and the Office of Mission and Values collaborated with the Society of Saint Vincent de Paul to produce episodic segments for TV series *Our Faith in Action* on Eternal World Television Network. The segments aired in July.

We partnered with DePaul's Community Service Association and St. Joseph Services to create a series of documentaries highlighting aspects of St. Joseph's Services community outreach initiatives.

SCA faculty collaborated on *The Mom's Project*, a 40 minute film highlighting diverse mothers expressing love for their children, distributed to children's hospitals to put on an internal TV loop.

James Choi directed and produced *Engage Earth*, a documentary on an after school art program created by world renown artist Denise Milan, for the largest underserved community in Sao Paulo, Brazil with the hopes of bringing the program to Chicago.

School of Design faculty LeAnne Wagner and B Rich have been collaborating with the *Fused Muse Ensemble* (FME) on their most recent project Edge of Shelter. FME increases awareness of local and global concerns through new artistic works that integrate music with other media and amplify those voices too often left unheard. The Edge of Shelter project focuses on homelessness awareness and advocacy.

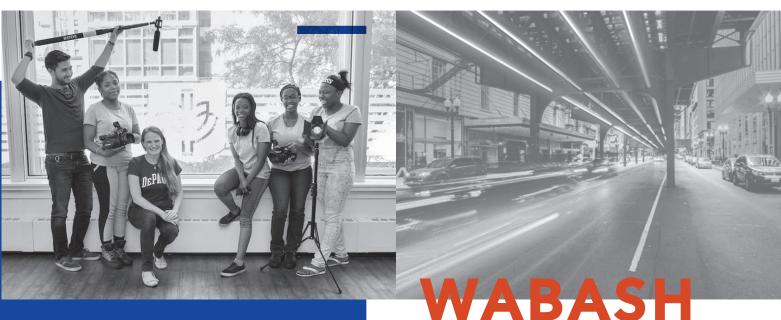
B Rich is also currently collaborating with André Perez and the *America in Transition* organization to design and develop a transmedia website and campaign to support the documentary series and outreach plan devoted to destigmatizing and supporting trans people around the country.

Bad at Sports, a podcast produced by Brian Andrews, partnered with *Open Engagement*, a conference on socially engaged art, and took over the WLPN 105.5 FM airwaves on April 22 to broadcast interviews from the conference.

SCA and film production company Digital Hydra partnered with *Kaleidoscope*, a child welfare agency, to host 19 kids, ages 6-16 for Kaleidoscope's first ever Winter Arts Camp. In addition to giving the kids and their chaperones a tour of Cinespace and the post-production studio Periscope, the Digital Hydra team—comprised of DePaul alumni, Jacquelyn Jamjoom, Hamzah Jamjoom and Patrick Wimp—coached Kaleidoscope's kids through recording interviews with one another on the DePaul soundstage using DePaul's professional equipment.

Associate Dean JoAnne Zielinski received the Spirit of DePaul award. The award highlights institutional Vincentian values and their relation to the achievement of DePaul's mission, and recognizes individuals for their leadership and service in the spirit of Saint Vincent de Paul.

#### CHICAGO CONNECTIONS



The School of Cinematic Arts partnered with the Chicago Housing Authority for its inaugural 6-week documentary filmmaking program in the summer of 2016. Teenage girls were introduced to basic theory, aesthetic, and technical skills and produced their own documentaries. Two of the documentary shorts created in the program, That's Not Me and Rise Up, were included in the Global Girl Media Film Festival. Rise *Up* was also accepted to the Windy City Film Festival, where it won the Rising Voices Award and was nominated for the Best Documentary Short.

As part of Digital Youth Network, last summer DePaul planned and hosted a 6-week program to bring mobile technology to CHA youth residents in under-resourced neighborhoods.

In the summer of 2017, the documentary filmmaking program was continued. Early on, the participants were paid a visit by Chaz Ebert, who wrote about it in her online journal. Additionally, the School of Design developed a 5-week interdisciplinary design program for an additional team of CMA youth.

LIGHTS

School of Design faculty Nate Matteson and LeAnne Wagner taught a two-course sequence during the winter and spring quarters in collaboration with The Wabash Lights, a sitespecific light installation beneath the Wabash Avenue elevated train tracks in Chicago's Loop. Students researched, designed, and prototyped dynamic, interactive experiences that utilize the Wabash Lights primarily as a public largescale video screen, tapping into a variety of current trends including augmented reality, data visualization, and gamification. The experiences they designed are controlled through a variety of interfaces: mobile apps, public kiosks, existing public data APIs, and an innovative, motion- and light-based interface projected into pedestrian space. The beta testing phase of the project was completed early this year.



## iD-LAB

CDM's new *Innovation Development Lab* (iD-Lab) serves as a space to build the bridges between DePaul and companies to grow into a leading technology innovation and research hub. Partners include AllState, Bosch, and CareerBuilder. Current work in the lab focuses on three primary areas: development of technology innovation projects with member companies, education through training, workshops and practical experiences and research on technology innovation.

#### **Highlights**

Digital Youth Network (DYN) put on Month of Code in December, providing coding workshops in Chicago classrooms.

DYN partnered with the Best Buy Geek Squad Academy for a 2-day workshop at DePaul, providing 10-18 year olds the opportunity to develop tech skills and spark their inner creativity.

CDM, the Theatre School, and the School of Music collaborated on a float for the Cultural Mile's Halloween Gathering.

Our Corporate Affiliate Partners program, which provides an opportunity for companies to develop long-lasting, strategic partnerships with a college dedicated to educating the next generation of IT leaders in a wide variety of disciplines, includes Bosch and EZ Links Golf.

Through her NSF-funded project Accelerate ECS4All, Lucia Dettori continued her partnership with CPS, Loyola, UIC, and The Learning Partnership to ensure all CPS high school students take at least one relevant and compelling computer science course (Exploring Computer Science - ECS). The partnership has now been formalized as the Chicago Alliance for Equity in Computer Science (CAFECS). Over the course of the last 5 years ECS has been taught in 40 CPS high schools to over 13,000 students.

Of these, 47% have been Hispanic, and 38% have been African American, both of which match the overall CPS demographics; 44% of the students have been female. As part of the grant, approximately 300 CPS teachers have attended professional development workshops at DePaul to prepare to teach ECS. The project also provides a coaching program to pair experienced ECS teachers with novice teachers. Building on the success of this initiative, CPS became the first district in the nation to make CS a high school graduation requirement starting with the 2020 graduating class.

For the third year, CDM hosted the Young Entrepreneurs Academy (YEA!), an 8-month program sponsored by the Chicago Chapter of the National Association of Women Business Owners (NAWBO) for middle school female students. Terry Steinbach instructed the students on writing a business plan, conducting market research, pitching to investors, and operating their own companies.

We hosted the Collected Voices Film Festival in September, screening a collection of short films, including our Project Bluelight film For the Records and the Preserves, directed by B. Rich and Anuradha Rana, CDM faculty. The fest focuses on original ethnographic works that explore the intersection of race, age, class, gender, and sexuality within Chicago society.

DePaul was selected to continue stewarding citywide City of Learning initiative.

#### INTERNATIONAL REACH

2016

STUDY ABROAD

We piloted a *Global Learning Experience* for post-production sound design students in partnership with Abertay University in Dundee, Scotland. Both DePaul and Abertay students were challenged to create soundscapes. CDM students created their perceived version of Dundee and Abertay students their perceived versions of Chicago.

In association with the *French Consulate*, French-Burkinabè Cinema journalist Claire Diao gave a masterclass on African Cinema and emerging French filmmakers whose work focuses on social and racial issues, and Academy Award winner Alain Gagnol held a masterclass for animation students.

CDM was a sponsor of the *Immersive Tech Summit*, an event put on by 2112 and the French Consulate's French Innovation Week.



Ottawa International Film Festival: This new annual program allows undergraduate and graduate animation students to travel to Ottawa, Canada and attend the Ottawa International Film Festival, the largest and most prestigious animation festival in North America. Students attend screenings, industry events, panels and talks, and meet with animators, critics, and directors from around the world.

Atlantis Dual-Degree Program: Since 2007, the full-year Atlantis program has allowed CDM juniors to take business courses in École de Commerce Européenne in Lyon, France and Linköping University in Sweden. The student is awarded a standard 3-year European bachelor's degree before returning to the U.S., and then, after completing their senior year at CDM, a second bachelor's degree from DePaul.

*Dare Academy, Abertay University*: This 5-week summer program is held at Europe's top ranked university for game design and home to industry leaders like 4J Studios, Outplay, and Reagent Games. The program combines lectures, workshops, and industry visits, and ends with the DiGRA/FDG Conference and Dare to be Digital game festival.

China Global Collaborative Software Engineering: Students majoring in a technology-related discipline are offered the immersive and unique opportunity to understand the quickly evolving and innovative Chinese software and IT industries, as well as China's rich history, culture, and modernity. In this two-week long trip, students travel to two of the most symbolic and vibrant cities in China: Shanghai, the commercial and financial hub teeming with technological and business innovations; and Beijing, the political and economic nerve center full of rich history and cultural heritage.



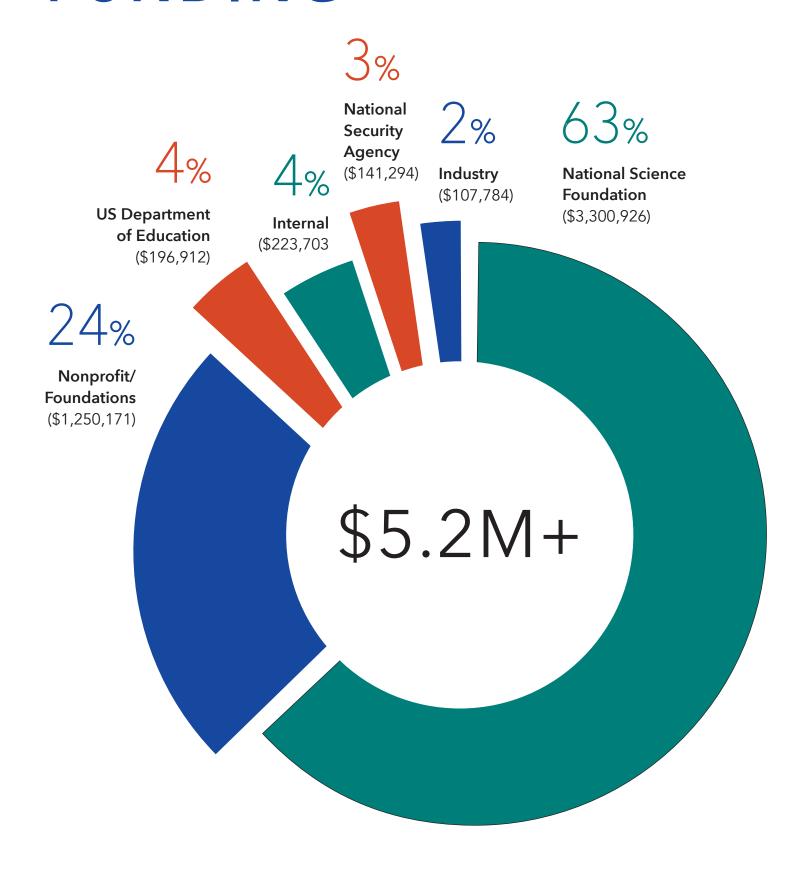
2018

**Documentary Filmmaking in India:** This "Beyond Bollywood" program is offered every other December intersession. In the fall, students take DC 370/470 to learn documentary techniques and prepare themselves for the intensive cultural immersion and hands-on workshop. For 3 weeks, students collaborate with an NGO under the guidance of filmmakers located in the heart of Bollywood, and create an original visual media project while exploring the Taj Mahal, palaces and forts of Jaipur, and the abandoned city of Fatehpur Sikri.

Computer Games and Animation in Japan: Students in this two-week study abroad program, offered every other December intersession, visit game and animation companies in Tokyo, Kyoto, and Nagoya to learn about the processes of crafting culturally significant Japanese entertainment. Students examine how Japanese games/animation/motion graphics have influenced Japanese culture and will visit museums, galleries, cultural centers and other sites to foster meaningful experiences and gather research for their personal projects.

### FACULTY GRANT

# **FUNDING**





#### CDM iD Lab

PI: Adelakun, Olayele | Allstate Insurance Company

#### CDM iD Lab

PI: Adelakun, Olayele | CareerBuilder

#### Investigating the Use of Information and Communication Technologies in Violence Interruption

PI: Erete, Sheena | National Science Foundation

#### Graduate Assistance in Areas of National Need

PI: Lytinen, Stephen | United States Department of Education

#### Chicago City of Learning

PI: Madison-Boyd, Sybill | MacArthur Foundation

#### Chicago SmartData Platform

PI: Malik, Tanu | University of Chicago

#### Geo Dataspace: Simplifying Data Management for Geoscience Models

PI: Malik, Tanu | National Science Foundation

#### GeoTrust: Improving Sharing and Reproducibility of Geoscience

PI: Malik, Tanu | National Science Foundation

#### Integrated Geoscience Observatory

PI: Malik, Tanu | National Science Foundation

#### 3D Curriculum Project

PI: Pinkard, Nichole | Bosch Corporation

#### Broadening Participation in Computing through a Community Approach to Learning

PI: Pinkard, Nichole | National Science Foundation

#### Chicago City of Learning Continued Stewardship and Implementation

PI: Pinkard, Nichole | MacArthur Foundation

#### Chicago CS for All RPP Workshop Support

PI: Pinkard, Nichole | National Science Foundation

#### Extending the Chicago City of Learning Platform

PI: Pinkard, Nichole | The Chicago Community Trust

#### Maker Education Initiative

PI: Pinkard, Nichole | Tides Foundation

#### Mobile City Science: Youth Mapping Community Learning Opportunities

Pl: Plnkard, Nichole | National Science Foundation

#### Partnerships for Urban STEM Learning Hubs

PI: Pinkard, Nichole | National Science Foundation

#### SaaS Platform and Implementation Support to Dallas City of Learning for Summer 2017

PI: Pinkard, Nichole | Big Thought

## Smart and Connected Communities: Reducing the Friction in the L3 Connects Infrastructure through the Integration of SMART Technologies

PI: Pinkard, Nichole | National Science Foundation

#### Functional Neural Mapping of Food Search Behavior for C.Elegans Using Genetic Tools and Computation

PI: Raicu, Daniela Stan | Co-PI: Furst, Jacob | DPU RFUMS

#### REU MedIX: Medical Informatics Experiences in Undergraduate Research

PI: Raicu, Daniela Stan ICo-PI: Furst, Jacob I National Science Foundation

#### Asked and Answered: Intelligent Data Science for Software Projects

PI: Rasin, Alexander | National Science Foundation

#### A Kit for Exploring Databases under the Hood for Security, Forensics, and Data Recovery

PI: Rasin, Alexander | Co-PI: Jacob Furst | National Science Foundation

#### **Relaxing Soundness**

PI: Riely, James | Co-Pi: Jagadeesan, Radha | National Science Foundation

#### Secure Design: Course and Experimentation Workshop

PI: Westbrook, Jessica | Co-PIs: Sharevski, Filipo and Trowbridge, Adam | National Security Agency

#### CHA Program in Documentary Filmmaking 2017

PI: Zielinksi, JoAnne I Chicago Housing Authority

#### CHA Program in Interdisciplinary Design 2017

PI: Zielinksi, JoAnne I Chicago Housing Authority

# **Internal**Grant Funding

Provider Perspectives of Telemedicine Adoption and Innovation

PI: Adelakun, Olayele | DePaul University Research Council

Oh Baby!

PI: Artes, Meghann | DePaul Academic Initiatives

A Software Framework for Human-in-the-Loop Machine Learning

PI: Brown, Eli | DePaul Academic Initiatives

Hardware Support for Collaborative Instruction

PI: Burke, Robin | DePaul University Research Council

Reading Chicago Reading
PI: Burke, Robin | DePaul Academic Initiatives

Love Never Dies and Yours is not the Taj Mahal finishing PI: Connelly, Shayna I DePaul University Research Council

Quiver, Festival Funding

PI: Connelly, Shayna I DePaul University Research Council

Changing the Debate

PI: Eltanal, Ron | DePaul Academic Initiatives

Sources of Computer Game Enjoyment: Card Sorting to Develop a New Model

PI: Fang, Xiaowen I DePaul University Research Council

Efficient Algorithms for Minimum Obstacle Removal PIs: Gemmell, Jonathan and Kanj, Iyad | DePaul Academic Initiatives

Extracting Sparse Distributed Representations for the Social Web

PI: Gemmell, Jonathan | DePaul University Research Council

Development of the New Introduction to Computational Neuroscience Course

PI: Hastings, Peter | DePaul Quality of Instruction

Preventing Web Attacks: Split HTML

PI: Heart, Karen | DePaul Academic Initiatives

Other People's Children, Web Series

PI: Hozian Anna | DePaul University Research Council

Other People's Children, Web Series

PI: Riddell, Brad | DePaul University Research Council

Illuminatus!

PI: Kalis, Christopher I DePaul University Research Council

Characterizing Problems that are as Hard as Satisfiability PI: Kanj, Iyad | DePaul Academic Initiatives

**Oblivion Verses** 

PI: Khatami, Alireza | DePaul Academic Initiatives

DBBuild: Tools for Conducting Reproducible Analyses in Urban Data Infrastructure

PI: Malik, Tanu | DePaul Academic Initiatives

The Center for Robust Decision Making in Climate and Economic Policy

PI: Matteson, Nathan | DePaul Academic Initiatives Grant

The Evolution of Proportion in the Sacred Architecture of Sigurd Lewerentz

PI: Matteson, Nathan | DePaul University Research Council

Diversity in Personalized Recommendation

PI: Mobasher, Bamshad | DePaul Academic Initiatives

User-Centered Design of Technology to Support Patient Empowerment in Emergency Medicine

PI: Montague, Enid | DePaul University Research Council

Designing a Sociotechnical System to Enable and Enhance Educator Roles to Support Youth Learning Pl: Nacu. Denise | DePaul Academic Initiatives

Analysis of Cultural Differences in Online Restaurant

PI: Nakayama, Makoto I DePaul University Research Council

The Exact Stretch Factor of Delaunay Triangulations
PI: Perkovic, Ljubomir | DePaul Academic Initiatives

Bernadette, Project Bluelight Film Festival Fees
PI: Psathas, John | DePaul University Research Council

Human-Computer Interaction in Practice: Support for Pedagogy

PI: Putnam, Cynthia | DePaul Academic Initiatives

Supporting Decision-making and Information-sharing about Educational Technologies for Children with Autism: Preliminary Interview/Survey Studies

PI: Putnam, Cynthia I DePaul University Research Council

What Makes an Electronic Health Record System (HER) Effective? An Empirical Study of Patterns of Use

PI: Hamed Qahri Saremi | DePaul Academic Initiatives

Medical Image Interpretation Using Smart Computer-Aided Diagnosis

PI: Raicu, Daniela Stan | DePaul Academic Initiatives

Language of Opportunity

PI: Rana, Anuradha I DePaul University Research Council

Diffusion of Privilege in a Database

PI: Rasin, Alexander I DePaul University Research Council

Identifying Security Breaches in a Hacked Database

PI: Rasin, Alexander | DePaul Academic Initiatives

Nanobot: Operation Pacific Vortex

PI: Rich, B. | DePaul Academic Initiatives

Superdogs

PI: Rich, B. | DePaul University Research Council

Gamiconocron

PI: Riddell, Brad | DePaul Academic Initiatives

Blood Myth, Designing and Building a Game to Promote

PI: Rusch, Doris | DePaul University Research Council

**Tidelines** 

PI: Socki, Steve | DePaul University Research Council

Building an Intelligent Interview Assistant System

PI: Steele, Adam | DePaul Academic Initiatives Grant

A Place to Call Home: Homelessness in America

PI: Suffredin, Susanne | DePaul Academic Initiatives

Automatic Summarization of Privacy Policies Using Natural Language Processing and Machine Learning

PI: Tomuro, Noriko I DePaul Academic Initiatives Grant

# FACULTY PUBLICATIONS

Abdollahpouri, H., **Burke, R. D., Mobasher, B.** (2017). Recommender Systems As Multistakeholder Environments. *Proceedings of the 25th Conference on User Modeling, Adaptation and Personalization.* 

**Adelakun, O. A.**, Garcia, Y., Han, W. (2017). Defining Dimensions of Patient Satisfaction with Telemedicine: An Analysis of Existing Measurement Instruments. *Proceedings of the 50th Hawaii International Conference on Systems Services.* 

**Adelakun, O. A.**, Garcia, R., Ismail, R., Tabaka, T. (2017). Hybrid Project Management: Agile with Discipline. Association for Information Systems Electronic Library (AISeL).

Affenit, R. N., **Barns, E., Furst, J. D., Rasin, A., Raicu, D.** (2017). Building confidence and credibility into CAD with belief decision trees. *SPIE Medical Imaging Proceedings*.

Al-Lawati, B. H., **Fang, X.** (2016). Diffusion of Innovations: The Case Study of Oman's e- Payment Gateway. *HCI in Business, Government, and Organizations: eCommerce and Innovation (Part I), HCII 2016, Lecture Notes in Computer Science* 9751.

An, Z., Feng, Q., **Kanj, I.**, Xia, G. (2017). The Complexity of Tree Partitioning. *Algorithms and Data Structures Symposium (WADS)*, Lecture Notes in Computer Science 10389.

Andrews, B. C. (2017). Introduction: Nato Thompson, Interview with Pablo Helguera, Introduction: Pablo Helguera, Interview with Pablo Helguera, Interview with Stephen Wright, Interview with Rick Lowe. In Terri Griffith, Duncan MacKenzie, Richard Holland (Eds.) Say It While You Still Mean It: Conversations in Art and Practice. Chicago: Open Engagement in Print.

Azhari, A., **Fang, X.** (2017). A Lexical Analysis of Online Reviews of Social Media Applications. *ICTO* (Information and Communication Technologies in Organizations and Society) 2017 Conference.

Bachman, D., Derby-Talbot, R., **Sedgwick, E. D.** (2016). Heegaard structure respects complicated JSJ decompositions. *Mathematische Annalen*, *365*, *137-1154*.

Bachman, D., Derby-Talbot, R., **Sedgwick, E. D.** (2016). Computing Heegaard Genus is NP-Hard. *A Tribute to Jiří Matou* sek.

Bishara, S., Baltes, J., Hamid, T., Li, T., **Nacu, D.**, Martin, C. K., **Gemmell, J. F.**, MacArthur, C., **Stan Raicu, D.**, **Pinkard, N. D.** (2017). Revealing Interaction Patterns Among Youth in an Online Social Learning Network Using Markov Chain Principles International Society of the Learning Sciences.

Britt, M. A., Kopp, K. J., Durik, A., Blaum, D., **Hastings, P. M.** (2016). Identifying General Cognitive Abilities Involved in Argument Comprehension and Evaluation. *Zeitschrift für Pädagogische Psychologie, Hogrefe*, 30, 79-95.

**Brown, E. T.**, Chang, R., Endert, A. (2016). Human-Machine-Learner Interaction: The Best of Both Worlds. *Human Centred Machine Learning Workshop at ACM CHI* 2016.

**Burke, R. D.**, Abollahpouri, H. (2016). Educational Recommendation with Multiple Stakeholders. 3rd International Workshop on Educational Recommender Systems.

**Burke, R. D.**, Abdollahpouri, H., **Mobasher, B.**, Gupta, T. (2016). Towards Multi-Stakeholder Utility Evaluation of Recommender Systems. UMAP Workshops.

**Burke, R. D.**, Eskandanian, F. (2016). Collaborative Recommendation of Informal Learning Experiences. *3rd International Workshop on Educational Recommender Systems*.

Carothers, K. J., Arizaga, J. A., Carter, J., **Taylor, J. M.**, Grant, K. E. (2016). The Costs and Benefits of Active Coping for Adolescents Residing in Urban Poverty. *Journal of Youth and Adolescence*, 45, 1323-37.

Carrazza, M., Kennedy, B., **Rasin, A., Furst, J. D., Stan Raicu, D.** (2016). Investigating the effects of majority voting on CAD systems: a LIDC case study. *SPIE Medical Imaging*.

Cheng, J., **Putnam, C.** (2017). Towards a Prototype Tool Leveraging Design Patterns to Support Design of Games for Brain Injury Therapy. *Proceedings of the 2017 annual conference extended abstracts on Human factors in computing system, (CHI EA '17).* 

Cheng, J., **Putnam, C.**, Guo, J. (2016). Always a Tall Order: Values and Practices of Professional Game Designers of Serious Games for Health. *Proceedings of the Annual SIGCHI Annual Symposium on Computer-Human Interaction in Play, (CHI PLAY '16).* 

#### **FACULTY PUBLICATIONS**

- Connolly, R., Miller, J., Uzoka, F.-M., Lunt, B., Schroeder, M., **Miller, C. S.**, Habinka, A. Red Fish Blue Fish: Reexamining Student Understanding of the Computing Disciplines. SIGITE '16 Proceedings of the 17th Annual Conference on Information Technology Education; ACM.
- Correa, T., Gustavo, B., Lemos, L., **Settle, A.** (2017). An Overview of Recent Solutions to and Lower Bounds for the Firing Synchronization Problem. Cornell University Library.
- Dillahunt, T., Israni, A., **Erete, S. L.**, Galusca, R., **Nacu, D.**, Sengers, P. (2017). Reflections on Design Methods for Underserved Communities. *CSCW '17: Computer Supported Cooperative Work and Social Computing Companion Proceedings.*
- **DiPierro, M.** (2016). Annotated Algorithms in Python (2nd Edition ed.). USA: Experts4Solutions.
- **DiPierro, M.**, **Hastings, P. M.** (2017). Social Quizzes with Scuiz. World Conference on Information Systems and Technologies.
- Ebling, S., S. Johnson, **R. Wolfe, R. Moncrief, J. McDonald**, S. Baowidan, T. Haug, S. Sidler-Miserez, and K. Tissi. Evaluation of Animated Swiss German Sign Language Fingerspelling Sequences and Signs. In International Conference on Universal Access in Human-Computer Interaction, pp. 3-13. Springer, Cham, 2017
- El-Dirany, M., Wang, F., **Furst, J. D.**, Rogers, J., **Raicu, D. S.** (2016). *Constructing Phylogenic Trees Through Compression* 2016 IEEE International Conference on Bioinformatics and Biomedicine.
- **Erete, S. L.**, Nicole, L., Mumm, J. S., Boussayoud, A., Ogbonnaya-Ogburu, I. F. (2016). "That Neighborhood is Sketchy!": Examining Online Conversations about Social Disorder in Transitioning Neighborhoods. *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems, Extended Abstracts*
- **Erete, S. L.**, Ryou, E., Smith, G., Fassett, K. M., Duda, S. (2016). Storytelling with Data: Examining the Use of Data by Non-Profit Organizations. *Proceedings of the 19th ACM Conference on Computer-Supported Cooperative Work & Social Computing*, CSCW 2016.
- Eskandanian, F., **Mobasher, B., Burke, R. D.** (2017). A Clustering Approach for Personalizing Diversity in Collaborative Recommender Systems. *Proceedings of the 25th Conference on User Modeling, Adaptation and Personalization.*

- Eskandanian, F., **Mobasher, B., Burke, R. D.** (2016). User Segmentation for Controlling Recommendation Diversity. *Proceedings of the Poster Track of the 10th ACM Conference on Recommender Systems* (RecSys 2016).
- Fang, X. (2017). Agreeableness and Computer Game Play: Who Plays What Games? *Proceedings of ICIST'2017* (7th International Conference on Information Systems and Technologies). Springer International Publishing.
- Froese, V., **Kanj, I.**, Nichterlein, A., Niedermeier, R. (2016). Finding Points in General Position. Proceedings of the 28th Canadian Conference on Computational Geometry (CCCG), pages 7-14.
- Fulek, R., Pelsmajer, M., **Schaefer, M. G.** (2016). Hanani-Tutte for Radial Planarity II. *International Symposium on Graph Drawing and Network VisualizationSchmiesing*, LeAnne
- Ganian, R., de Haan, R., **Kanj, I.**, Szeider, S. (2016). On Existential MSO and its Relation to ETH. *Proceedings* of the 41st International Symposium on Mathematical Foundations of Computer Science (MFCS).
- Goto, M. A., **Jagadeesan, R.**, Jeffrey, A., **Pitcher, C. S.**, **Riely, J. W.** (2016). An extensible approach to session polymorphism. *Mathematical Structures in Computer Science*, 26, 465–509.
- Guo, J., Rahimi, M., Huang, J., **Rasin, A.**, Hayes, J. H., Vierhauser, M. (2016). Cold-start software analytics. *Proceedings of the 13th International Workshop on Mining Software Repositories*.
- Hassan, O., **Kanj, I**., Lokshtanov, D., **Perkovic, L.** (2016). On the Ordered List Subgraph Embedding Problems. Algorithmica, 74-3, pages 992–1018.
- **Hastings, P. M.**, Hughes, S., Blaum, D., Wallace, P. S., Britt, M. A. (2016). Stratified Learning for Reducing Training Set Size. *Intelligent Tutoring Systems*.
- Huang, L., Kim, H., **Furst, J. D., Stan Raicu**, D. (2016). A Run-length Encoding Approach for Path Analysis of C. elegans Search Behavior. *Computational and Mathematical Methods in Medicine*.
- **Hozian, A. M.** (2017). Beginning Acting Later in Life (Chapter Five: Starting Again). In Anna Weinstein and Chris Qualls (Eds.) Acting for the Stage. Routledge.

- Izu, C., Mirolo, C., **Settle, A.**, Mannila, L., Stupuriene, G. (2017). Exploring Bebras Tasks Content and Performance: A Multinational Study. Informatics in Education: A Journal of Eastern and Central Europe, 16.
- Jagadeesan, R., Desharnais, J. (Eds.) (2016). 27th International Conference on Concurrency Theory, CONCUR 2016 (vol. 59). DagStuhl: Schloss Dagstuhl Leibniz-Zentrum fuer Informatik. Germany.
- Jason, L. A., McManimen, S., Sunnquist, M., Brown, A., **Furst, J. D.**, Newton, J. L., Strand, E. B. (2016). Case definitions integrating empiric and consensus perspectives. *Fatigue: biomedicine, Health & Behavior*, 4, 1–23.
- **Jia, X., Jones, C. A.** (2016). An Approach for the Automatic Adaptation of Domain-Specific Modeling Languages for Model-Driven Mobile Application Development. *Springer Berlin Heidelberg*, 558, 365-379.
- Jiang, G., Kiefer, R. C., Rasmussen, L. V., Solbrig, H. R., Mo, H., Pacheco, J. A., Xu, J., **Montague, E.,** Thompson, W. K., Denny, J. C., others (2016). Developing a data element repository to support EHR-driven phenotype algorithm authoring and execution. *Journal of Biomedical* Informatics, 62, 232–242.
- Jiang, G., Solbrig, H. R., Kiefer, R., Rasmussen, L. V., Mo, H., Pacheco, J. A., **Montague, E.**, Xu, J., Speltz, P., Thompson, W. K., others (2016). Harmonization of Quality Data Model with HL7 FHIR to Support EHR-driven Phenotype Authoring and Execution: A Pilot Study.
- **Jones, C. A., Jia, X.** (2016). An Empirical Evaluation of AXIOM as an Approach to Cross-platform Mobile Application Development. *Proceedings of the 11th International Conference on Software Engineering and Applications* (ICSOFT-EA).
- **Kanj, I.**, Komusiewicz, C., Sorge, M., Jan van Leeuwen, E. (2016). Parameterized Algorithms for Recognizing Monopolar and 2-Subcolorable Graphs. *Proceedings of the 15th Scandinavian Symposium and Workshops on Algorithm Theory* (SWAT), volume 53.
- Kanj, I., Perkovic, L., Turkoglu, D. (2016). Degree Four Plane Spanners: Simpler and Better. *Proceedings of the 32nd International Symposium on Computational Geometry* (SoCG), volume 51.
- Kanj, I., Perkovic, L., Turkoglu, D. (2016). Degree Four Plane Spanners: Simpler and Better. CoRR, abs/1603.03818.

- **Kanj, I., Perkovic, L., Turkoglu, D.** (2017). Degree Four Plane Spanners: Simpler and Better. *Journal of Computational Geometry, 3.*
- **Kanj, I., Sedgwick, E. D.**, Xia, G. (2017). Computing the Flip Distance between Triangulations. *Discrete Applied Mathematics*, 58, 313-344.
- **Kanj, I., Sedgwick, E.D.**, Xia, G. (2017). Computing the flip distance between triangulations. *Discrete and Computational Geometry*, 58, 313-344.
- Kothari, A., Bianco, B., Brownlee, S., Evans, A. E., Chang, V. A., Abood, G., Kuo, P., **Settimi, R., Stan Raicu, D.** (2016). Characterizing the Role of a High Volume Cancer Resection Ecosystem on Low Volume, High Quality Surgical Care. *Surgery*, 4, 839-849.
- **Lockhart, A**. (2016). *Looking Inward*. Toronto CA: Colour Code Printing.
- Lohar, S., Huang, J., **Rasin, A.** (2016). Evaluating the interpretation of natural language trace queries. International Working Conference on Requirements Engineering: Foundation for Software Quality
- Magliano, J. P., Hastings, P. M., Kopp, K., Blaum, D., & Hughes, S. Computer-based assessment of essays based on multiple documents. In Ivar Braten, Jason Braasch and Matt McCrudden (Ed.), *Handbook of Multiple Source Use*. London: Routledge.
- Martin, C. K., **Nacu, D., Pinkard, N. D.** (2016). An approach to using log data to understand and support 21st century learning activity in K-12 blended learning environments. Journal of Learning Analytics (3) 37-87.
- Matousek, J., **Sedgwick, E. D.**, Tancer, M., Wagner, U. (2016). Untangling two systems of noncrossing curves. *Israel Journal of Mathematics*, 212, 37–79.
- **McDonald, J. C., Wolfe, R. J.**, Baowidan, S., Guo, N., Johnson, S., Moncrief, R. (2017). Using N-Gram Analytics to Improve Automatic Fingerspelling Generation. *Linguistics and Literature Studies* / Horizon Research, 5, 187 197.
- **McDonald, J. C., Wolfe, R. J.**, Schnepp, J., Hochgesang, J., Jamrozik, D. G., Stumbo, M., Larwan, B., Bialek, M., Thomas, F. (2016). An Automated Technique for Real-Time Production of Lifelike Animations of American Sign Language. *Universal Access in the Information Society*, 15, 551-566.

#### **FACULTY PUBLICATIONS**

- McGee, S., McGee-Tekula, R., Greenberg, R., **Dettori,** L., Reed, D., Wilkerson, B., Yanek, D., Rasmussen, A., Chapman, G. (2016). Does a Taste of Computing Increase Computer Science Enrollment? Research in Equity and Sustained Participation in Engineering, Computing and Technology (RESPECT).
- **Miller, C. S.** (2016). Human language and its role in reference-point errors. *Psychology of Programming Interest Group.*
- Miller, C. S., Settle, A. (2016). Some Trouble with Transparency: An Analysis of Student Errors with Object-oriented Python. 12th Annual Conference on International Computing Education Research (ICER 2016), Association for Computing Machinery.
- **Mittleman, D. D., Friedman, E.** (2017). *Annual Editions: Technologies, Social Media, and Society 16/17* (22nd ed.). New York: McGraw-Hill/Dushkin.
- Nacu, D., Martin, C. K., Pinkard, N. D., & Sandherr, J. An Interface Design Approach to Encouraging Online Contributions among Underrepresented Youth. (pp. 174-196). Hershey, PA: IGI Global.
- Nacu, D., Martin, C. K., Schutzenhofer, M., Pinkard, N. D. (2016). Beyond Traditional Metrics: Using Automated Log Coding to Understand 21st Century Learning Online. Proceedings of the Third (2016) ACM Conference on Learning @ Scale.
- **Nakayama, M.** (2017). Exploratory Study on the Stability of Consumer Rationality in Judging Online Reviews. *Journal of Electronic Commerce in Organizations*, 15, 1-22.
- **Nakayama, M.**, Chen, C. (2016). Impact of Project Management Tools on Project Estimates and Benefits. International Conference on Internet Studies.
- **Nakayama, M.**, Chen, C., Taylor, C. (2017). The Effects of Perceived Functionality and Usability on Privacy and Security Concerns about Cloud Application Adoptions. *Journal of Information Systems Applied Research*, 10, 4-11.
- **Nakayama, M.**, Chen, C. C., Taylor, C. (2016). The Effects of Perceived Functionality and Usability on Privacy and Security Concerns about Adopting Cloud Applications. 2016 *Proceedings of the Conference on Information Systems Applied Research*.

- **Nakayama, M.**, Medlin, D., Chen, C., Vannoy, S. (2016). Key Factors Increasing the Trust and Intention To Adopt Standard Cloud-Based Applications. *Pacific Asia Conference on Information Systems* (PACIS).
- **Nakayama, M.**, Wan, Y. (2016). Exploratory Study on Anchoring: Fake Vote Counts of Consumer Reviews over Information Quality Judgments. *Journal of Theoretical and Applied Electronic Commerce Research*, 12, 1-20.
- **Putnam, C.**, Reiner, A., Ryou, E., Caputo, M., Cheng, J., Allen, M., Singamaneni, R. (2016). Human-Centered Design in Practice: Roles, Definitions, and Communication. *Journal of Technical Writing and Communication*, 46, 446-470.
- **Qahri Saremi, H.**, Turel, O. (2016). School engagement, information technology use, and educational development: An empirical investigation of adolescents. *Computers & Education*, 102, 65-78.
- **Quinn, H.** (2017). University College Design Association Summit Proceedings.
- Railsback, S. F., Ayllon, D., Berger, U., Grimm, V., **Lytinen, S. L.**, Sheppard, C. J., Thiele, J. C. (2017). Improving Execution Speed of Models Implemented in NetLogo. *Journal of Artificial Societies and Social Simulation*.
- **Riddell, B.** (2017). We Provide the Bucket. In Pang Ni Landrum and Jennifer Quintenz (Ed.) Los Angeles, CA: *Empower: Mind Over Matter Words Empower Book 2.*
- **Rusch, D. C.** (2017). Making Deep Games Designing Games with Meaning and Purpose. Boca Raton, FL: CRC Press Taylor & Francis Group.
- Saket, B., Kim, H., **Brown, E. T.**, Endert, A. (2016). Visualization by Demonstration: An Interaction Paradigm for Visual Data Exploration. 2016 IEEE Conference on Information Visualization.
- Schaffer, O., **Fang, X.** (2016). Impact of Task and Interface Design on Flo. The 15th Pre-ICIS HCI/MIS Workshop 2016.
- Schaffer, O., **Fang, X.** (2017). Sources of Computer Game Enjoyment: Card Sorting to Develop a New Model. *Lecture Notes in Computer Science 10272.*

- **Schrank, B.** (2016). Bust A Cup: Reclaiming Risk in Play. GIAIMIE: *The Italian Journal of Game Studies*.
- **Schweizer, B.**, Guins, R., & Lowood, H. (2016). Difficulty. In Henry Lowood and Raiford Guins (Eds.), *Debugging Game History*. Cambridge, MA: MIT Press.
- **Schweizer, B.** (2016). Visiting the Videogame Theme Park. Subaltern Media. 6.
- **Schweizer, B.**, Pearce, C., & Lukas, S. A. (2016). Remediation on the High-Seas: A Pirates of the Caribbean Odyssey. In S. Lukas (Ed.) *A Reader in Themed and Immersive Spaces*. Pittsburgh: ETC Press.
- **Settle, A.** (2017). ACM Turing 50th Celebration Conference in China. *SIGCSE Bulletin*, 49.
- **Settle, A.**, Doyle, J., **Steinbach, T. A.** (2017). Participating in a Computer Science Linked-courses Learning Community Reduces Isolation. Cornell University Library.
- **Settle, A., Steinbach, T. A.** (2016). Improving Retention and Reducing Isolation via a Linked-courses Learning Community. *Proceedings of the 17th Annual Conference on Information Technology Education*. ACM.
- **Sharevski, F.** (2016). Cyberattack Surface of the Next-Generation Mobile Networks. In Wheizi Meng (Ed.), *Protecting Mobile Networks and Devices: Challenges and Solutions* (1st ed., pp. 20). Boca Raton: CRC Press.
- Simon, Sheard, J., Morgan, M., Petersen, A., **Settle, A.**, Sinclair, J., Cross, G., Riedesel, C. (2016). Negotiating the Maze of Academic Integrity in Computing Education. ITiCSE '16 *Proceedings of the 2016 ITiCSE Working Group Reports, ACM.*
- Stan Raicu, D., Nacu, D., Gemmell, J. F. (2016). Recommender System to Support Brokering of Youth Learning Opportunities. 3rd Workshop on EdRecSys in conjunction with the 2016 IEEE/WIC/ACM International Conference on Web Intelligence.
- **Stan Raicu, D., Nacu, D., Gemmell, J. F., Pinkard, N. D.**, Hamid, T. (2016). *Helping Educators Leverage Youth Interest in STEM Out-of-school Programs*. Poster at RESPECT 2016.
- Stan Raicu, D., Nacu, D., Gemmell, J. F., Pinkard, N. D., Hamid, T., Li, R. (2016). Using Automated Log Coding and Data Mining to Understand Online Teaching and Learning. Poster at Digital Media and Learning (DML) 2016 Workshop" Learning Analytics in Informal Spaces.

- **Tomuro, N., Lytinen, S. L.**, Hornsburg, K. (2016). Automatic Summarization of Privacy Policies using Ensemble Learning. Poster at ACM Conference on Data and Application Security and Privacy (CODASPY).
- **Trowbridge, A., Westbrook, J. P., Sharevski, F.** (2016). Dark Net: Design In Secret Spaces. *AIGA Frontiers Design Educators Conference.*
- Turel, O., **Qahri Saremi, H.** (2016). Problematic Use of Social Networking Sites: Antecedents and Consequence from a Dual System Theory Perspective. Journal of Management Information Systems, 33, 1087-1116.
- **Yu, J. T.** (2016). An Empirical Study of Denial of Service (DoS) against VoIP. *Proceedings of the 8th IEEE International Symposium on Cyberspace and Security.*
- **Yu, J. T.** (2016). Supporting Hands-on Network Lab Exercises for On-Line Students. *Proceedings of 2016 International Conference on E-Learning, E-Business, E-Government (EEE'16).*
- Vahedian, F., **Burke, R. D., Mobasher, B.** (2016). Meta-Path Selection for Extended Multi-Relational Matrix Factorization. *The Twenty-Ninth International Flairs Conference.*
- Vahedian, F., **Burke, R. D., Mobasher, B.** (2016). Weighted Random Walks for Meta-Path Expansion in Heterogeneous Networks. *Proceedings of the Poster Track of the 10th ACM Conference on Recommender Systems (RecSys 2016).*
- Van Bevern, R., **Kanj, I.**, Komusiewicz, C., Niedermeier, R., Sorge, M. (2016). Twins in Subdivision Drawings of Hypergraphs. *Proceedings of the 24th International Symposium on Graph Drawing (GD), Lecture Notes in Computer Science*.
- Varkey, A. B., Manwell, L. B., Brown, R. L., **Montague, E.**, Laiteerapong, N., Burgess, D., Ibrahim, S. (2016). Impact of Work Conditions and Minority Patient Populations on Quality and Errors. *Health Services Research and Managerial Epidemiology* (3).
- Wagner, J., **Rasin, A.**, Grier, J. (2016). Database image content explorer: Carving data that does not officially exist. *Digital Investigation*, 18, S97–S107.

#### **FACULTY PUBLICATIONS**

Wang, I., Smith, C., Shao, M., Huang, L., **Furst, J., Stan Raicu, D.**, Kim, H. (2016). *C. elegans Search Behavior Analysis Using Dynamic Time Warping Approach* 2016 IEEE International Conference on Bioinformatics and Biomedicine.

**Westbrook, J., & Trowbridge, A. D.** (2017). "Coding Slowly" in Deepening Teaching for Computational Media and Generalist Design. In Filimowicz, M. and Tzankova, V. (Ed.) *Teaching Computational Creativity.* New York, NY: Cambridge University Press..

Wiley, J., **Hastings, P. M.**, Blaum, D., Jaeger, A. J., Hughes, S., Wallace, P., Griffin, T. D., Britt, M. A. (2017). Different approaches to assessing the quality of explanations following a multiple-document inquiry activity in science. *International Journal of Artificial Intelligence in Education*, 27, 33.

Wolfe, R. J., Efthimiou, E., Glauert, J., Hanke, T., **McDonald, J. C.**, Schnepp, J. (2016). Special Issue: *Recent Advances in Sign Language Translation and Avatar Technology* (4th ed., vol. 15). New York, NY: Springer Verlag.

**Yu, J. T.** (2016). An Empirical Study of Denial of Service (DoS) against VoIP. 8th IEEE International Symposium on Cyberspace and Security.

**Yu, J. T.** (2016). Supporting Hands-on Network Lab Exercises for On-Line Students. *Proceedings of 2016 International Conference on E-Learning, E-Business, E-Government* (EEE'16).

Zagal, J., & Mateas, M. Gameplay Segmentation in Vintage Arcade Games. In Bogost, I and Bittanti, M (Ed.)

Zanotti, G., Horvath, M., Barbosa, L. N., Immedisetty, Venkata Trinadh Kumar Gupta, **Gemmell, J. F.** (2016). Infusing Collaborative Recommenders with Distributed Representations. *arXiv* preprint *arXiv*:1608.06298.

Zheng, Y., **Mobasher, B.,** & **Burke, R. D.** (2016). Emotions in Context-Aware Recommender Systems. (pp. 311–326). In Marko Tkalčič, Berardina De Carolis, Marco de Gemmis, Ante Odić, Andrej Košir (Eds.) Emotions and Personality in Personalized Services. Springer International Publishing.

Zheng, Y., **Mobasher, B., Burke, R. D**. (2016). User-Oriented Context Suggestion. Proceedings of the 24th Conference on User Modeling, Adaptation, and Personalization (UMAP).

Zhu, M., Zhao, F., **Fang, X.**, Moser, C. (2017). Developing Playability Heuristics based on Nouns and Adjectives from Online Game Reviews. *International Journal of Human-Computer Interaction*, 33.

# RECOGNITION

# for FACULTY

# FILMS

Our faculty screened their films at over 200 festivals between July 2016 and June 2017. The following is a selection of the recognition and screenings these films have received.

#### FACULTY FILM RECOGNITION

#### 147 Pianos

#### **Dolores Wilber (Director), Robert Steel (Supervising Sound Editor/Composer)**

Special Recognition for Contribution to the Field (2017), Piano Technicians Guild Official Selection (2016), Chicago International Music and Movies Festival Official Selection (2016), Future Places Media Lab for Citizenship

#### Burnt

#### Devin Bell (Writer/Director/Producer)

Official Selection (2016), Austin Film Festival
Official Selection (2016), Chicago International Children's Film Festival
Official Selection (2016), Kineko International Children's Film Festival
Official Selection (2016), Lincoln Film Festival

#### Count Me In

#### **Susanne Suffredin (Editor)**

Broadcast Award (2016), WTTW Chicago National Broadcast (2016), PBS Premiere Screening and Discussion (2016), Chicago Cultural Center Screening and Discussion (2016), The New 400 Theater

#### Dog Eat Dog

#### **Tim Peternel (Executive Producer)**

Official Selection (2016), Cannes Film Festival
Official Selection (2016), London International Film Festival
Official Selection (2016), Stiges International Film Festival
Official Selection (2016), Toronto International Film Festival

#### Edge of Alchemy

#### **Rob Steel (Composer/Orchestrator)**

Official Selection (2017), Sound of Silent Film Festival

#### **Empty Space**

#### James Choi (Director/Producer/Editor), Brian Zahm (Cinematographer), JoAnne Zielinski (Executive Producer)

Winner: Best Feature Film and Audience Award (2017), Windy City International Film Festival Winner: Best Indie Spirit, Best Actress, and Best Actor (2017), Twister Alley International Film Festival Winner: Audience Award for Best Narrative Film (2016), Lighthouse International Film Festival Official Selection (2017), Millennium Park Summer Film Series Official Selection (2017), International Filmmaker Festival of World Cinema, France

#### Every Ghost Has an Orchestra

#### Shayna Connelly (Director)

Humanities Division Award of Distinction (2017), Columbus International Film + Video Festival Silver Award: International Documentary (2017), South Georgian Bay Film Festival Official Selection (2017), Athens International Film and Video Festival Official Selection (2017), Brooklyn Film Festival

#### A Farmer's Road

#### Peter Biagi (Cinematographer)

Winner: Mindie Award (2016), Miami Independent Film Festival Winner: Spotlight Film Award (2016), Mosaic World Film Festival Semi-Finalist (2016), Los Angeles CineFest Official Selection (2016), Naperville Independent Film Festival

#### Feast

#### Peter Biagi (Cinematographer)

Broadcasted taping of Albany Park Theater Company play (2016), WTTW

For the Records

#### Doris Rusch (Lead Game Designer/Producer), Anuradha Rana (Filmmaker/Producer)

Official Selection (2016), Collected Voices Chicago Ethnographic Film Festival

#### Gardening at Night

#### Shayna Connelly (Director), Wendy Roderweiss (Producer)

Award of Merit in Fiction Filmmaking (2016), University Film and Video Association Official Selection (2017), Ann Arbor Film Festival Official Selection (2017), Chicago Underground Film Festival Official Selection (2017), Crossroads Film Festival

#### Gone Into the Clearing

#### **Brad Riddell (Writer)**

Best Dramatic Screenplay Finalist (2017), Smoky Mountain Film Festival Best Short Screenplay Finalist (2017), Smoky Mountain Film Festival Best Short Screenplay Finalist (2016), Wayfarer Film Festival Third Place Screenplay (2016), Colorado International Film Festival

#### GRUB

#### Lisa Barcy (Animator)

Official Selection (2016), Midwest Independent Film Festival

#### Happy Birthday Kevin

#### John Psathas (Producer/Director/Writer)

Official Selection (2017), Dam Short Film Festival
Official Selection (2017), Hollywood Comedy Shorts Film Festival
Official Selection (2017), Blackbird Film Festival
Official Selection (2016), Arohanui Film Festival
Official Selection (2016), Twister Alley International Film Festival

#### Henry: Portrait of a Serial Killer

#### **Steven Jones (Producer)**

30th Anniversary Screening (2016), Chicago International Film Festival

#### Home(less) Home

#### Kahra Scott-James (Sound Designer)

Official Selection (2016) Rio de Janeiro International Short Film Festival

#### In the Details

#### **Brad Riddell (Writer)**

Semi-Finalist: Short Screenplay (2016), Los Angeles Cinefest Short Screenplay Contest Official Selection (2017), Oregon Short Film Festival

#### It's Just a Gun

#### Dan Klein (Writer)

Winner: Silver (2016), Student Academy Awards Official Selection (2017), Cleveland International Film Festival Junk Girl

#### Robert Steel (Composer)

Outstanding Original Music Award (2016), Sahar International Short Film Festival Official Selection (2017), Sound of Silent Film Festival

#### The Kama Sutra Club

#### Dan Klein (Writer/Director/Producer)

Official Selection (2016), New York Television Festival

#### FACULTY FILM RECOGNITION

#### Life Itself

#### Dana Kupper (Director of Photography)

Best Documentary Nominee (2016), News and Documentary Emmy Awards

#### Lives: Visible

#### Peter Biagi (Cinematographer)

Premiere (2017), Gene Siskel Film Center

#### Mistreated and Wild

#### Shayna Connelly and Chris Kalis (Directors)

Finalist: Best Music Video (2016), Ocktober Film Festival

Official Selection (2016), Chicago International REEL Shorts Film Festival

Official Selection (2016), Sound Unseen Film Festival

#### The Most Hated Woman in America

#### Michael Flores (Editor)

Official Selection (2017), South by Southwest Film Festival

#### Mr. Chang's New Address

#### Alireza Khatami (Writer/Director)

Special Screening Invitation, Migrations and Mediations: Politics of Movement (2017), Society for Cinema and MEdia

#### Nostalgic

#### Ron Eltanal (Writer/Director)

Invited Screening (2017), Garden City International Film Festival

#### The Nude/Le Nude

#### **Brian Zahm (Writer/Director/Cinematographer)**

Audience Award (2016), Lighthouse International Film Festival

Finalist: Best Short Film (2016), Amarcord Arthouse Television + Video Festival

Bronze Palm Award (2016), Mexico International Film Festival

#### Preserves

#### Anuradha Rana (Producer) and B. Rich (Director)

Official Selection (2016), Collected Voices Ethnographic Film Festival

Official Selection (2016), Mostra American Film Series

#### Reunion

#### **Robert Steel (Composer)**

Official Selection (2016), University Film and Video Association Conference

#### Signals: where do we go from here?

#### Connelly, Shayna (Director), Robert Steel (Supervising Sound Editor)

Finalist/Featured Film in curated online showcase (2017), North Portland Unknown Film Festival

Honorable Mention (2017), Experimental Forum

Official Selection (2016), Amarcord Arthouse Television Film Festival

Official Selection (2017), Berlin Experimental Film Festival

Official Selection (2017), London International Film Festival

#### Shabam! (Episodes 2 and 4)

#### **Wendy Roderweiss**

Official Selection (2016), Hear Now Audio Festival

#### FACULTY FILM RECOGNITION

#### Sleepy Steve

#### Meghann Artes (Writer/Director/Animator) and Robert Steele (Composer)

Finalist (2016), USA Film Festival Staff Pick (2016), Vimeo Official Selection (2016), Cinequest Film Festival

#### Sparrow Duet

#### **Steve Sock (Producer/Director)**

Official Selection (2017), Ann Arbor Film Festival

Official Selection (2016), Animaze-Montreal International Animation Film Festival

Official Selection (2016), Budapest Short (BuSho) International Film Festival

Official Selection (2016), Arte Non Stop Film Festival, Buenos Aires

Official Selection (2016), Experimental Animation Festival, CDMX Mexico

#### Speed Dating

#### Meghann Artes (Writer/Director/Animator), Robert Steel (Composer)

Video on Demand (2016), Tribeca/United Airlines Audience Choice Award (2016), Disposable Film Festival

Omeleto Feature (2017), Youtube via Omeleto (2.6M views)

#### Splash Hit

#### **Andrews, Brian (Animator)**

Screening (2016), Junior Giants Day Screening, San Francisco Giants

#### Stage Three

#### Roderweiss, Wendy (Writer/Director)

Distribution for narrative short (2016), Pacific Voice Inc. Territory- Japan

#### Stopping For Death: The Nurses of Wells House Hospice

#### Wendy Roderweiss (Writer/Director/Producer)

Official Selection (2016), Culture Unplugged

#### Ten More

#### Riddell, Brad (Writer/Director); Connelly, Shayna (Producer); Eltanal, Ron (Editor/Actor); Robert Steele (Supervising Sound Editor)

Official Selection (2017), Big Muddy Film Festival

Official Selection (2017), deadCenter Film Festival

Official Selection (2017), Kansas City Film Festival

Official Selection (2017), Syracuse International Film Festival

#### Thrill Ride

#### **Chris Parrish (Writer/Director/Producer)**

Finalist: Best Sci Fi/Fantasy/Thriller/Horror Feature Film (2017), 9th Annual Burbank International Film Festival Nominee: Best American Independent Feature Film (2017), 41st Cleveland International Film Festival

Nominee: Best Fantasy Feature Film (2017), 12th Annual Gen Con Film Festival

Premiere (2016), Classic Cinemas Woodstock IL

#### Water Cycle

#### **Steve Socki (Producer/Director)**

Official Selection (2017), Eye Myth Film Festival

# FACULTY EXHIBITIONS

**Andrews, Brian C.**, "Bad at Sports." Commissioned booth and podcast interviews. New Art Dealers Alliance Miami Art Week 2016, Miami, FL (December 2016).

**Lockhart, Amy,** "Ways of Something: Dreamlands Immersive Cinema and Arts," Group Exhibition at Whitney Museum of American Art, New York, NY. (October 2016 - February 2017).

**Margalus, Jayson R.**, "Dash!" Hacked Amazon Dash button game. Milwaukee Maker Faire, WI (September 2016).

**Margalus, Jayson R.** (Co-Organizer) and **Matteson, Nathan**, (Co-organizer), "Thotcon Conference Badges." Vision holder badges that facilitate a game experience. Chicago, IL (April 2017).

**Matteson, N.**, Hall, M., Göritz, H. "S:t Petri 50 år: kontext, fragment, och influenser," Exhibit. Klippan, Skåne, Sweden. (June 2016 - August 2016).

**Matteson, Nathan**, "protoType: Der Teufelshaufen," TypeCon, Seattle, WA (August 2016).

Paritsis, Savvas, Mastering, "The Sound of Silent Film Festival 2016." (2016).

**Roberts, Scott D.**, Comic book and print exhibition at Small Press Expo, Bethesda, MD. (September 2016).

**Roberts, Scott D.**, Comic book and print exhibition at Chicago Alternative Comics Expo, Chicago, IL. (June 2016).

#### FACULTY EXHIBITIONS

**Rusch, Doris C.**, "Perfection" and "Elude." CTRL + ALT Exhibit at the Smithsonian Asian Pacific American Center, New York, NY. (November 2016).

**Rusch, Doris C.**, "Soteria - Dreams as Currency." Different Games Festival Showcase, Brooklyn, NY. (2016). Rusch, Doris C., "Soteria - Dreams as Currency." Games + Learning + Society Game Festival Showcase, Madison, WI. (2016).

**Rusch, Doris C.**, "Soteria - Dreams as Currency." Indie Game Area at Tokyo Game Show, Tokyo, Japan. (2016). Rusch, Doris C., "Soteria - Dreams as Currency." Meaningful Play Game Festival Showcase, Michigan State University, East Lansing, MI. (2016).

**Schrank, Brian**, "Gentle Threads." Jury-selected Exhibition at Collider 7 + Tiny Cinema, University of Akron Emily Davis Gallery at the Myers School of Art, OH. (August 2016).

**Schrank, Brian**, "Gentle Threads." Jury-selected Exhibition University of Hawaii Manoa, HI. (August 2016).

**Schrank, Brian**, "A Moment Free from Darkness." Jury-selected for Curated Exhibition, CICA Museum, South Korea. (July 2016).

**Schrank, Brian**, "A Moment Free from Darkness" Juryselected for Curated Exhibition, Bit Bash, Chicago, IL. (August 2016).

**Schrank, Brian**, "A Moment Free from Darkness" Juryselected for Curated Exhibition, Meaningful Play, Michigan State University, East Lansing, MI. (October 2016).

**Schrank, Brian**, "A Moment Free from Darkness" Juryselected for Curated Exhibition, Indie Prize Showcase, San Francisco, IL. (July 2016).

**Schrank, Brian**, "Mating Season." Art game developed live in front of audience. Jury-selected Performance, Print Screen Festival at Digital Arts and Culture Festival, Israel.

(June 2017).

**Steel, Robert**, Supervising Sound Editor, "Elgin Short Film Festival" (2017).

**Wagner, LeAnne** (Designer), Nagata, Satoki (Photographer), "Inside Out Project: National Child Abuse Prevention Initiative," Public art installation. Adjust Creative, Chicago, IL. (April 2015 - Present).

**Westbrook, Jessica, Trowbridge, Adam D.**, "Gateway Drug." Experiential design at Inside/Outside, San Francisco State University School of Design, CA. (Feb-May, 2017).

Westbrook, Jessica, Trowbridge, Adam D., "CH2 barelyLegal" and "openSourceAbortion." Experiential design at Typeforce 8, Chicago, IL. (February 2017).

**Westbrook, Jessica, Trowbridge, Adam D.**, "CH2 barelyLegal." Experiential design. at Hacking / Modding / Remixing as Feminist Protest exhibition, Carnegie Mellon University, Pittsburgh, PA. (January- February 2017).

**Westbrook, Jessica, Trowbridge, Adam D.** "CH2 barelyLegal." Experiential design at IEEE VIS 2016 Arts Program, Baltimore, MD. (October 2016).

#### Westbrook, Jessica, Trowbridge, Adam D.,

"unattendedVaporware." Augmented reality at Codes & Modes: ReFraming Reality, Virtuality & Non-Fiction Media, New York, NY. (March 2017).

#### Westbrook, Jessica, Trowbridge, Adam D.

"unattendedVaporware." Augmented reality at Artist and Location, CICA Museum, Gyeonggi-do, Korea. (September 2016 - October 2016).

**Wilber, Dolores A.**, "MAKE AMERICA AGAIN," Invited artist exhibition and presentation, Always Was, Always Will Be, Madrid Spain. (June 2017 - July 2017).

# STUDENT

## **ACCOMPLISHMENTS**

MFA Screenwriting student Keely Wise was named a Black List/Cassian Elwes Independent Screenwriting Fellow for her script *Plain Jane*. She attended this year's Sundance Festival and met with Elwes, producer of such films as Dallas Buyers Club and Ain't Them Bodies Saints.

Five School of Computing students (Artur Oganezov, Arpankumar Patel, Megan Pecho, Xavier Sepulveda and Sriram Yarlagadda) were recognized by Illinois Technology Foundation's "Fifty for the Future" as the tech industry's best and brightest students.

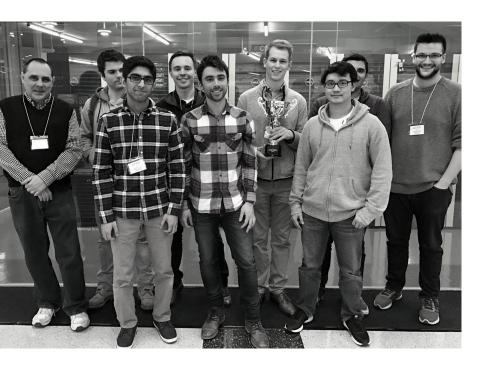
The anti-anxiety game *Soteria*, created in our Play 4 Change Lab by students alongside Assistant Professor Doris Rusch, won the bronze medal at this year's International Serious Play Awards. The game was also featured at the Tokyo Game Show in the indie game area.

Student films Shmevolution (Nolan Downs) and Recursion (Joel Benjamin) were screened at the Chicago International Film Festival.

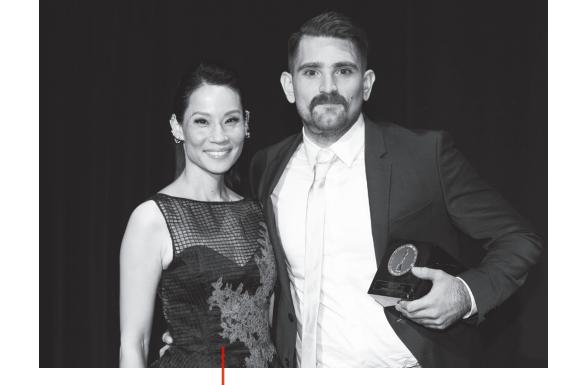
In May, CineYouth screened the student films *Lost* (Jordan Blazak) and *FACES* (Shannon Rodeberg).

Students Jessika Stec and Miguel Carrazza presented research papers at SPIE in February.

The Office of Mission & Values launched The Vinny Prize, awarding cash prizes to students who create new, engaging, and innovative content that highlight the life and mission of St. Vincent de Paul and Louse de Marillac. The winners were CDM students Brandon Ciarlo (alongside SNL student Sarah Frost), Chaz Bottoms, and Lauren Major.



Our Security Daemons team placed fourth nationally in the Collegiate Cyber Defense Competition (CCDC) after winning the CCDC Midwest region finals for the third year in a row.



# **ALUMNI** RECOGNITION

Carter Boyce received a bronze Student Academy Award for his animation *Die Flucht*, which was his senior capstone project.

Two animated shorts created by SCA alumni while they were students (Carter Boyce's *Die* Flucht and Gavin Wright's A Fresh Start) were shown on all 111 screens in Classic Cinemas movie theaters the first two weeks of June.

Alumnus Ali Rizvi (DC '10) was on a team of journalists at McClatchy who won the *Pulitzer* Prize in Explanatory Reporting for the "Panama Papers" project. Ali, a video journalist, coproduced an accompanying motion graphic video illustrating the complex world of offshore banks and corporations.

Tom Dean was selected for the Black List Screenwriter Lab, and his script *The Time* Traveler's La Ronde was chosen as a 2016 Black List script.

Two recent Screenwriting MFA alums set up a webseries for Lifetime called *The Young* Hillary Diaries.

MFA Cinema alum Alex Thompson was featured in *Newcity's 2016 Film 50*: Chicago's Screen

Computer Science alum Michael Block is the lead programmer of "We are Chicago," a game about Chicago gun violence, that was featured in *The Chicago Tribune*.

# VISITING SPEAKER SERIES VISITING SPEAKER SERIE R SERIES VISITING SPEAKER SERIES VISITING SPEA G SPEAKER SERIES **VISITING SPEAKER SERIES** VISIT

#### **Visiting Artists Series Guests**

Dan Rybicky, Director Screening of *Almost There* followed by on-stage conversation

Dinesh Sabu, Director, and Matt Lauterbach, Editor Screening of *Unbroken Glass* followed by on-stage conversation

Courier 12 Screenwriting Conference featuring:
Brian Banks, Executive, Nickelodeon
Samantha Olsson Shear, Head of Development, Kickstart
Stephany Folsom, Screenwriter, *Thor: Ragnarok*Zach Cannon, Script Coordinator Notorious
Marc Manus, Manager, Zero Gravity Management
Aaron Rahsaan Thomas, Writer, *The Get Down*Kam Miller, Writer and Producer, *Law & Order: SVU*Jack Epps Jr., Screenwriter, *Top Gun*Steven E. de Souza, Screenwriter, *Die Hard* 

Verite Documentary Event featuring:
Dinesh Sabu, Director, *Unbroken Glass*Aruna Jha, Professor, University of Illinois at Chicago and Founder, Asian American Suicide Prevention Initiative Rooshey Hasnain, Professor, University of Illinois at Chicago Gordon Quinn, Artistic Director and Founding Member, Kartemquin Films
Leslie Simmer, Director of Editing, Kartemquin Films

Matt Conboy, Director Screening of *Goodnight Brooklyn* followed by on-stage conversation

T.J. Cimfel and David White, Screenwriters Screening of *Intruders* followed by on-stage conversation Kim Lamberty and Rev. Craig Mousin Screening of *Exodus: Stories of Refugees and Migrants Fleeing War and Persecution* followed by on-stage conversation

J.P. Olsen and Bev Chase Screening of *Vice* followed by on-stage conversation

Joel Potrykus, Director Screening of *Alchemist Cookbook* followed by on-stage conversation

Stacy Title, Director and Jonathan Penner, Screenwriter Screening of *The Bye Bye Man* followed by on-stage conversation

Doug Sweetland, Animator Screening of *Storks* followed by on-stage conversation

Women in Film Panel featuring: Sharon Walker, Head, Panavision Chicago Hannah Welever, Director of Photography Yong Muhajil, Sound Recordist/Director of Photography Janice Arthur, Steadicam Operator

Paul Schrader, Writer/Director Screening of *Taxi Driver* followed by on-stage conversation

Michael R. Lewis, Agent Masterclass: How to Get an Agent

#### School of Design Talks

Irene Posche, Media Researcher/Artist and PhD Candidate, Vienna Technical University Handcrafting the Digital

Tim Rogers, Founder/Director, Action Button Entertainment and Designer/Director, VIDEOBALL Slow Action: Balancing + Tuning a Three-Minute Game George Aye, Co-Founder/Principal, Greater Good Studio We Can't Wait for Change Chris Crawford, Founder, Game Developers Conference Paradigm Shift

Asi Burak, CEO, Power Play and Chairman, Games for Change Power Play: How Video Games Can Save the World

Dr. Kentaro Toyama, W.K. Kellogg Associate Professor, University of Michigan an Fellow, Dalai Lama Center for Ethics and Transformative Values at MIT What if Good Design Isn't Enough?

Dale Dougherty, Founder, Make Magazine and Founder/Executive Chairman, Maker Media The Maker Movement

Clara Fernandez-Vara and Matt Weise, Co-Founders/Game Designers/Writers, Fiction Control Narrative Design is the New Game Design

Dr. Shenja van der Graaf, Executive Director, imec The Many Lives of Design

Mattie Brice, Associate Director, IndieCade and Instructor, The New School and New York University Finding the Body in Play

Tobias Frere-Jones, Founder, Frere-Jones Type and Lecturer, Yale School of Art

# VISITING SPEAKER SERIES VISITING SPEAKER SERIE R SERIES VISITING SPEAKER SERIES VISITING SPEA G SPEAKER SERIES **VISITING SPEAKER SERIES** VISIT

#### Research Colloquium Guests

Dr. Libby Hemphill, Associate Professor, Illinois Institute of Technology Politicians and the Policy Agenda: Does U.S. Congress twitter Use Direct New York Times Content?

Dr. Robin Burke, Professor, DePaul University Recommendation for Multiple Stakeholders

Dr. Lian Wang, Head of Big Data, BlueFocus Communication Group The Marketing Power of First Party Data in the Big Data Era

Dr. Craig Miller, Professor, DePaul University Figurative Speech and the Errors that Novice Programmers Make

Mr. Cyril Nigg, Sr. Director of Data Sciences, Catalina Marketing What They Don't Tell You about Being a Data Scientist: 10 Day-to-Day Challenges

Mr. James Wagner, PhD Student, DePaul University Database Forensic Analysis with DBCarver

Dr. Amanda Lazar, Postdoctoral Fellow, Northwestern University The Role of Technology in Understanding Perspectives on Aging and Health

Dr. Sorin Matei, Professor, Purdue University The 1% Effect: Social Differentiation in Social Media Groups

Mr. Tom Schenk, Chief Data Officer, City of Chicago Chicago Analytics Symposium Keynote

Mr. Taihua Li, MS Predictive Analytics Student, DePaul University Recommender Systems to Support Brokering of Youth Learning Opportunities Mr. Owen Schaffer, PhD Student, DePaul University What Makes Games Fun? Card Sorting to Investigate Sources of Computer Game Enjoyment

Ms. Fatemeh Vahedian, PhD Candidate, DePaul University A Milt-Relational Recommender System Framework for Heterogeneous Information Networks

Dr. Rafael Tenorio, Professor, DePaul University Economic Behavior and Incentive Provision in BitTorrent Communities: A Look from Within

Dr. Dai-Hai Ton-That, Paris Saclay University Efficient Indexing Techniques for Spatio-Temporal Data on Mobile Devices

Dr. Olayele Adelakun, Associate Professor, DePaul University Innovation, Education, and Research at the iD Lab

Dr. Shiyi Wei, Postdoctoral Associate, University of Maryland Towards Practical Program Analysis: Introspection and Adaptation

Ms. Motahareh Bahrami, PhD Student, Wichita State University Effective Assignment and Assistance to Software Developers and Reviewers

Dr. Zonghua Gu, Associate Professor, Zhejiang University Analysis and Optimization of Resource-Constrained Real-Time Embedded and Cyber-Physical Systems

Mr. Sheng Li, PhD Candidate, Northeastern University Robust Representations for Data Analytics Under Uncertainty

Dr. Rana Forsati, Postdoctorate Researcher and Instructor, Michigan State University Matrix Completion and Distance Metric Learning with Side Information for Recommender Systems and Social Network Mining Dr. Duru Turkoglu, Instructor, DePaul University Batch-Responsive Kinetic Data Structures

Dr. Hamed Qahri Saremi, Assistant Professor, DePaul University Who Will Drop IT Addiction? A Theoretical Integration and an Empirical Investigation

Mr. Marc Rutzen, Cofounder and CTO, EndoScore EndoScore—Real Estate Analytics

Dr. Luisa F. Polania, Machine Learning Scientist, American Family Mutual Insurance Company A Stroll through Some Physiological and Wellness Applications of Deep Learning and Signal Processing

Dr. Vijay K. Gurbani, Distinguished Member of Technical Staff, Bell Labs Mitigating Mimicry Attacks Against the Session Initiation Protocol

Dr. David M. Liebovitz, MD/FACP, University of Chicago Steps Toward Achieving the Promise of Electronic Health Records

Dr. Cynthia Putnam, Associate Professor, DePaul University Principles of Accessibility for People with Disabilities and Aging Populations

Dr. Clare Bates Congdon, Visiting Associate Professor, Bowdoin College It's not Junk: Using Evolutionary Computation to Infer Functional Regions in Noncoding DNA

Dr. Yolanda Rankin, Assistant Professor, Spelman College In-Game Social Interactions that Facilitate Second Language Acquisition

# CDM in the NEWS

Aug. 23 | The Woodstock Independent Woodstock Filmmaker Debuts 'Thrill Ride' Chris Parrish

Aug. 28 | Mokena Herald NEws Makers fair in Mokena celebrates those who create and innovate Jay Margalus

*Aug. 29* | Hollywood Reporter Student Academy Award Winners Unveiled Carter Boyce

*Aug. 29* | Movie City News Academy Announces 2016 Student Academy Award Winners Carter Boyce

*Aug. 29* | Below the Line Academy Reveals 2016 Student Academy Award Winners Carter Boyce

Aug. 29 | Animation Magazine2016 Student Academy Award Winners AnnouncedCarter Boyce

Aug. 29 | Georgia World2016 Student Academy Award Winners List Is Full of New Schools, More Geographically Diverse Carter Boyce

Aug. 29 | Deadline.comStudent Academy Award Winners UnveiledCarter Boyce

Aug. 29 | The Star Press Filmmaker spotlights Muncie for movie John Lerchen Sept. 1 | Ledger Independent
Taking in the big picture
Nick Reese
Sept. 6 | News-Gazette
Cissna Park grad among movie winners

Carter Boyce

Sept. 12 | DePaulia DePaul grad nabs Student Academy Award Carter Boyce

Sept. 15 | Direct Marketing News Jennifer Boyce: With the future of data analytics, anything is possible Jennifer Boyce

Sept. 20 | Knowledge@ Wharton
Business radio on Sirius, discussing Russian data hack
Jacob Furst

**Sept. 23** | Fox News Young filmmakers thank the academy at Student Academy Awards Carter Boyce

*Sept. 23* | Roanoake.com, Animation Magazine Young filmmakers thank the academy at Student Academy Awards
Carter Boyce

*Sept. 26* | Elgin Courier News Elgin Short Film Festival shines light on filmmakers and their work Carter Boyce

Sept. 28 | Reel Chicago Free DePaul Screenwriting Conference with top writers *Sept. 29* | Miami Herald, (Chicago AP) Hollywood screenwriters booked for DePaul conference

*Oct. 3* | Chicago Tribune 'Top Gun,' 'Thor' and 'L&O: SVU' screenwriters to share expertise this weekend

Oct. 13 | Newcity Film Film 50 2016 Shayna Connelly, Dana Kupper, Alex Thompson

Nov. 1 | Chicago Inno Chicago Inno Show Episode 25: Why Groupon Matters, What's Ahead for Women in Tech Rosalee Wolfe

Nov. 9 | Michigan Dail
"If 4chan don't like you, you're doing something
right": "Knuckle Sandwich" developer talks creative
freedom and role-playing

*Nov. 13* | Animation Magazine The Long Shorts List Carter Boyce

Dec. 2 | CBS Chicago Young CHA Residents Become Documentary Filmmakers

Jan. 4 | DNA Info
DePaul Cinema School grows thanks to hands-on
partnership with Cinespace
John Corba

Jan. 5 | Reel Chicago DePaul at Cinespace expands to a second 12.5K stage John Corba *Feb. 17* | Chicago Tribune This coworking space hacks kids' cars and helps modernize the concrete industry Jayson Margalus

*Feb*, 19 | The DePaulia DePaul professor directs film in memory of son Chris Parrish

March 18 | Odisha Sun Times, India Live Today Impulsive Facebook use may cause brain imbalance Hamed Qahri-Saremi

March 22 | Scroll Today Beware! Over use of social networking sites linked to brain imbalance Hamed Qahri-Saremi

*April 20* | Curbed Chicago Wabash Lights Concept Moving Beyond Beta

May 7 | Daily North Shore Gorton Films Bring Books to Life Victor Aronovich

June 19 | WTTW's "Chicago Tonight"
'Paula' Avatar to Ease Communication between the
Hearing and Deaf
Rosalee Wolfe, Sarah Johnson, Robyn Moncrief

June 26 | "Making a Difference" WMAQ-TV NBC5 Summer Program Aims to Inspire Students in Chicago Public Housing John Psathas

# 2017

# PREVIEW

# New Degree Programs

The new PhD in Human-Centered Design, which began in the fall of 2017-18, prepares students to become interdisciplinary scholars who can apply a variety of methodological approaches at the intersection of technology, human behavior, and design.

The Master of Science in Product Innovation and Computing will launch in the 2018 Winter Quarter. This is a joint program with DePaul's Driehaus College of Business. Incorporating the innovation and entrepreneurship processes with computer science will allow students in the program to recognize broader issues in technology-related problems and understand the business constraints affecting this technology. Graduates will be prepared to start their own businesses, work in companies that build mobile apps and other technology-based products and services, and traditional organizations that would like a mobile app for their product(s).

The MFA in Creative Producing, a joint degree program with the Kellstadt Graduate School of Business, enrolled its first cohort in September 2017. The curriculum prepares graduate students to become innovative leaders in the evolving world of digital entertainment, possessing a discerning creative and business acumen.

Our MFA in Game Design, which also launched in the fall of 2017, is designed for students interested in developing games that have considerable social and cultural impact.

Our new BS in Cyber-Physical Systems Engineering prepares students to develop and manage cyber-physical systems, often referred to as Internet of Things (IoT).

To meet the growing demand for data scientists and data analysts, we began offering an interdisciplinary BS in Data Science degree this fall.

As of Fall 2017, the graduate digital cinema degrees offered will be an MS in Film and Television and an MFA in Film and Television. The programs are renamed and revised versions of the MS in Cinema Production and MFA in Cinema.



# **New** Facilities

The Daley Building is housing a new craft space, which opened to all students on September 6th, 2017. *The Idea Realization Lab*, or IRL, is a student-driven space built for the DePaul community and encourages the pursuit of thinking through making. IRL encourages people to practice crafting knowledge, find problems through improvisation, and take ownership of their community through direct engagement. IRL has of the traditional woodshop/workshop tools in addition to digital fabrication tools, microcontrollers, and other newer technology. Some of the marquee machines include a 90 watt laser cutter, stereolithographic 3D printer, embroidery/sewing machine, and an extensive array of crafting tools and materials. The lab also has two stop-motion studios. IRL's mission is to support students to take control of the spaces around them, enabling them to learn by doing.

Robotics and Medical Engineering Lab (RoME): The overarching objective of this new cyber-physical systems lab is to bring together the expertise of computer and engineering to better meet real-life societal challenges including, but not limited to, healthcare, disaster response, and space exploration through research and development of next generation cyber-physical systems. The lab also focuses on understanding the fundamentals of muscular biological entities such as octopi and squid to help develop next generation robotics aimed at enabling challenging surgical procedures. It is equipped with state of the art measurement and instrumentation systems such as high-end computers loaded with industrial software for modeling and simulations, Polhemus G4 wireless magnetic tracking system, ATI Nano25 high-fidelity 6D force transducers, 3D Systems Touch D Styli, digital oscilloscopes, multimeters, microscopes, signal generators, range of electromechanical motors, motor control boards, embedded computer boards, and a wide array of prototyping materials/components.

We are finalizing a new *Virtual and Augmented Design Lab* (VAD) in the DePaul Center that focuses on researching and developing spatial VR games using Vive and Oculus + Touch, and AR games on Microsoft HoloLens, iPhones using ARKit, and Android devices.

# **International** Film Festival



The Big Shoulders International Film Festival, created by SCA faculty Anu Rana, Rob Steel, Gary Novak, JoAnne Zielinsk is dedicated to presenting the work of innovative filmmakers from around the world. The Big Shoulders International Film Festival is a front seat to the world's stories. It is our mission to promote diversity and inclusion by showcasing the work of emerging young voices and unique ways of storytelling. The festival will take place in February of 2018. The Office of Mission and Values is a co-sponsor for the event.

# Executive in Residence

Steve Rubinow has been hired as an Executive in Residence. Rubinow will teach courses in Information Science and related areas, and will serve as the director of CDM's Institute for Professional Development (IPD). He will assess IPD's program mix, current and potential new audiences, and how IPD develops and delivers programs.



Steve Rubinow
Executive
in Residence

#### Studio X

In 2016-17 we became cosponsors of Studio X, a Center for faculty development that fosters and supports research at the interface between computing and humanities, along with the University Library and the College of Liberal Arts and Social Sciences. We will continue our partnership with this Center, raising the visibility of the computing/humanities interface, deepening institutional commitment to that interface, and strengthening the dialogue between faculty engaged in humanities and computational work. All programs and events through Studio X are free and open to the public.

#### **DePaul University** College of Computing and Digital Media 243 S. Wabash Ave. Chicago, IL 60604





