

Chapman University

Chapman University Digital Commons

Student Scholar Symposium Abstracts and Posters

Center for Undergraduate Excellence

Fall 12-4-2019

Chapman Ambassador Tour Robot

Alexandra Lewandowski

Chapman University, lewandowski@chapman.edu

Yanni Parissis

Chapman University, parissis@chapman.edu

Khiry Carter

Chapman University, kcarter@chapman.edu

Hilary Lee

Chapman University, huilee@chapman.edu

Follow this and additional works at: https://digitalcommons.chapman.edu/cusrd_abstracts



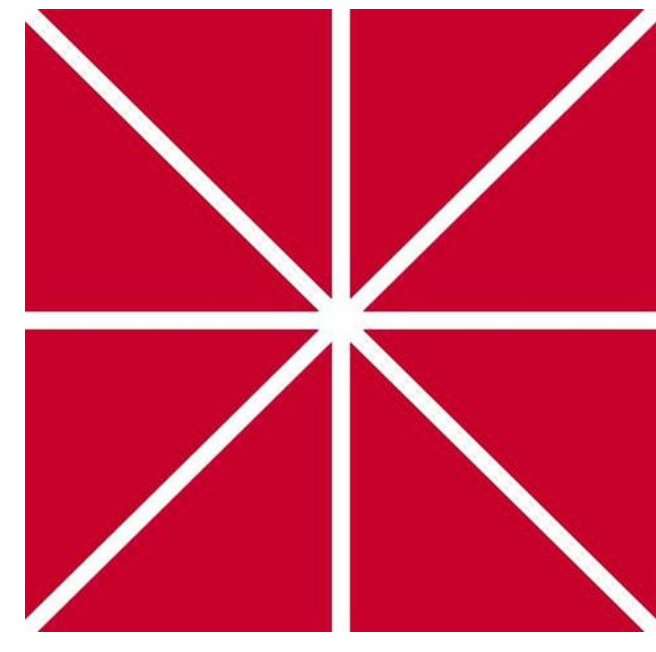
Part of the [Communication Commons](#), and the [Robotics Commons](#)

Recommended Citation

Lewandowski, Alexandra; Parissis, Yanni; Carter, Khiry; and Lee, Hilary, "Chapman Ambassador Tour Robot" (2019). *Student Scholar Symposium Abstracts and Posters*. 347.

https://digitalcommons.chapman.edu/cusrd_abstracts/347

This Poster is brought to you for free and open access by the Center for Undergraduate Excellence at Chapman University Digital Commons. It has been accepted for inclusion in Student Scholar Symposium Abstracts and Posters by an authorized administrator of Chapman University Digital Commons. For more information, please contact laughtin@chapman.edu.



Chapman Ambassador Tour Robot

Khiry Carter, Hilary Lee, Alex Lewandowski, Yanni Parissis,
mentored by Austin Lee, PHD
School of Communication, Chapman University

Abstract

Being a student ambassador improves a student's confidence and leadership skills. With an increasing demand for technology skills, our project will display how the ambassador robot can assist student ambassadors while improving upon their efficiency, by discussing information during college campus tours and familiarizing students with robot applications and their technology. The ambassador robot can support students during tours by answering a question about specific knowledge that may have slipped an ambassador's mind. The robot will also be able to create a group-focused atmosphere that will allow ambassadors to have the opportunity to lean on a dependable teammate for specific responses just as the robot depends on the ambassador for upkeep. With current technology it is nearly impossible for a robot to do a complete tour independently, but with our research, we want to see precisely how the ambassador robot can improve a university campus tour for prospective students and families while positively developing our student ambassadors' skills and confidence with robot applications. The student ambassador robot is not a replacement for student leadership and their roles or campus tours. The student and robot ambassador are the future of leadership efficiency and a bold new campus experience for all students and families to enjoy!



Feasibility of a Tourism Robot

Non Limiting Factors	Limiting Factors
Ambassador Robot is simple to set up	Robot cannot bring the human experience while explaining things
Can be programmed to know all the facts about his tour giving the human ambassador a less stress over knowing everything	Can only know answers to limited questions any abstract questions would have to be answered by tour guides
It can walk on its own and avoid hitting anything while walking	Limited battery life, needs Wi-Fi and not waterproof

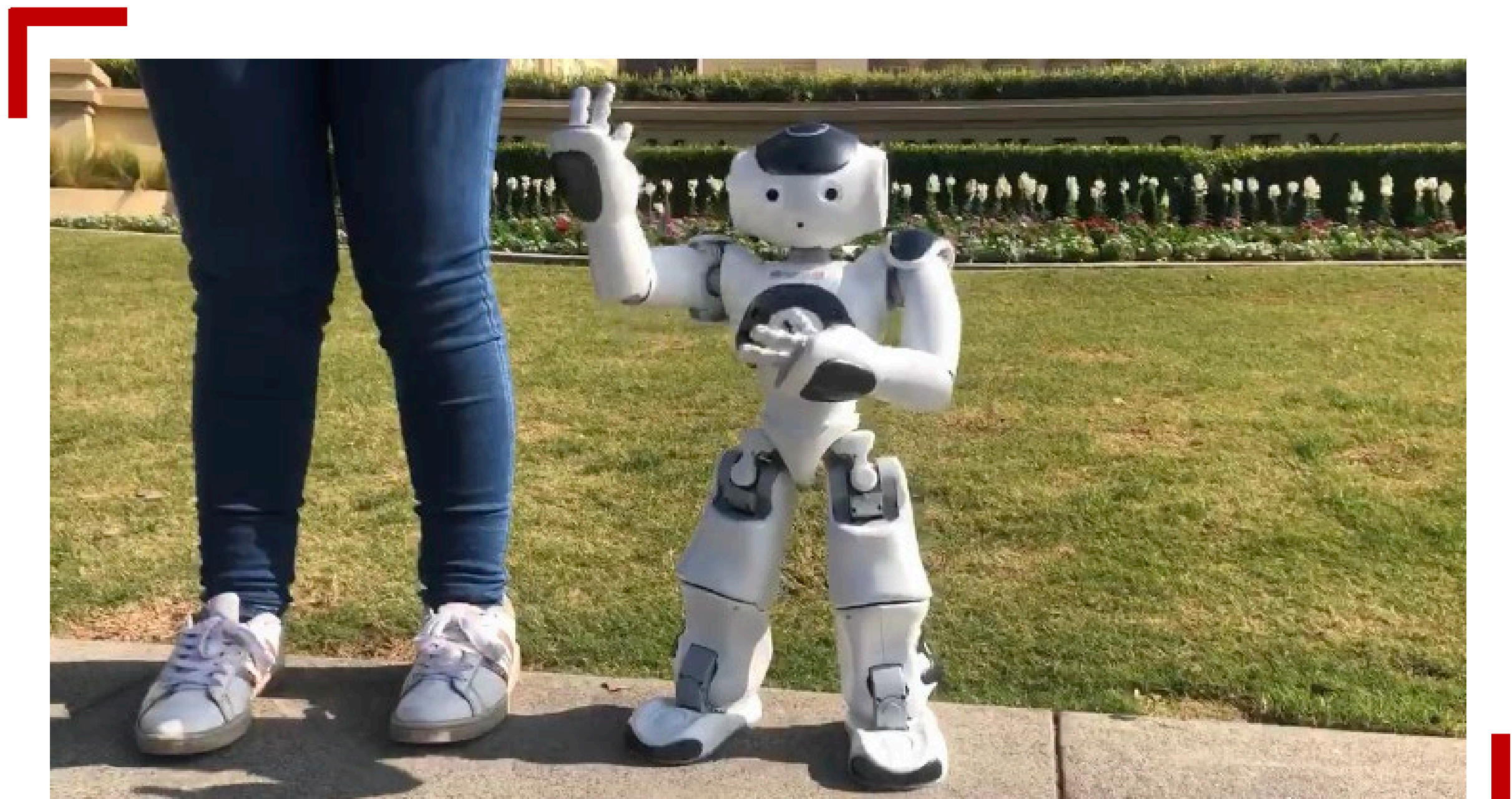


In Other Words:

The Ambassador Robot can work; however it is very limited to where it can guide people and still needs to have a human partner to help with the tour with currently technology.

Economic Implications

- The role of the robot is not to *replace* tour guides, but rather serve as a form of support.
- There may be potential economic costs of repair and updates. When it comes to adopting tourism robots, there may be anxieties of whether the upfront and continual costs of upkeeping the robot are outweighed by the advantages and benefits it provides.
- It is also possible that the robots can generate money indirectly through publicity for simply the phenomenon of having a tourism robot
- As robot tour guides become more widespread, repair costs will go down.
- Ultimately, it is an investment.



Social Implications

The Future

Social robotics have been pervasive in finding implications in various fields from medical, to education and farming. As artificial intelligence grows it is only natural that these implications expand into other industries such as **service** or **tourism**.

Examples of Robots in Service/Tourism Industry

- **Lindsey:** a robot tour guide with artificial intelligence built at the Lincoln Centre for autonomous systems in the U.K
- **Pepper:** a robot that that also uses artificial intelligence used to give tours at the Smithsonian museum in Washington D.C.
- Pepper is used strategically to bring more foot traffic into lesser viewed exhibits and is also used at the Westfield mall for friendly greetings to help bring more customers.

Video Synopsis

To demonstrate how we conceive an ambassador robot to function for a tour like the one we have on campus, our video mirrors a typical Chapman tour with the addition of NAO aiding and enhancing the experience.

