Capstone Design Expo Posters

School of Engineering

2015

Visualization of NLP Extractions

K. Barbour
Virginia Commonwealth University

D. Vieth
Virginia Commonwealth University

D. Warraich
Virginia Commonwealth University

Team Members:
K. Barbour, D. Vieth, D. Warraich
Faculty Advisor:
Prof. Bridget McInnes, Ph.D.
Sponsor:
Securboration, Inc.
Sponsor Advisor:
Joshua Powers, CTO

COMPUTER SCIENCE

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Introduction

- **Securboration-** development company working with security and collaboration
- **Natural Language Processing (NLP)**
- **NLP-** interaction and understanding between computers and human language
- **Focus on displaying and visualizing entities in text**
- **Given an extraction program that scans numerous files and extracts this pertinent information.**
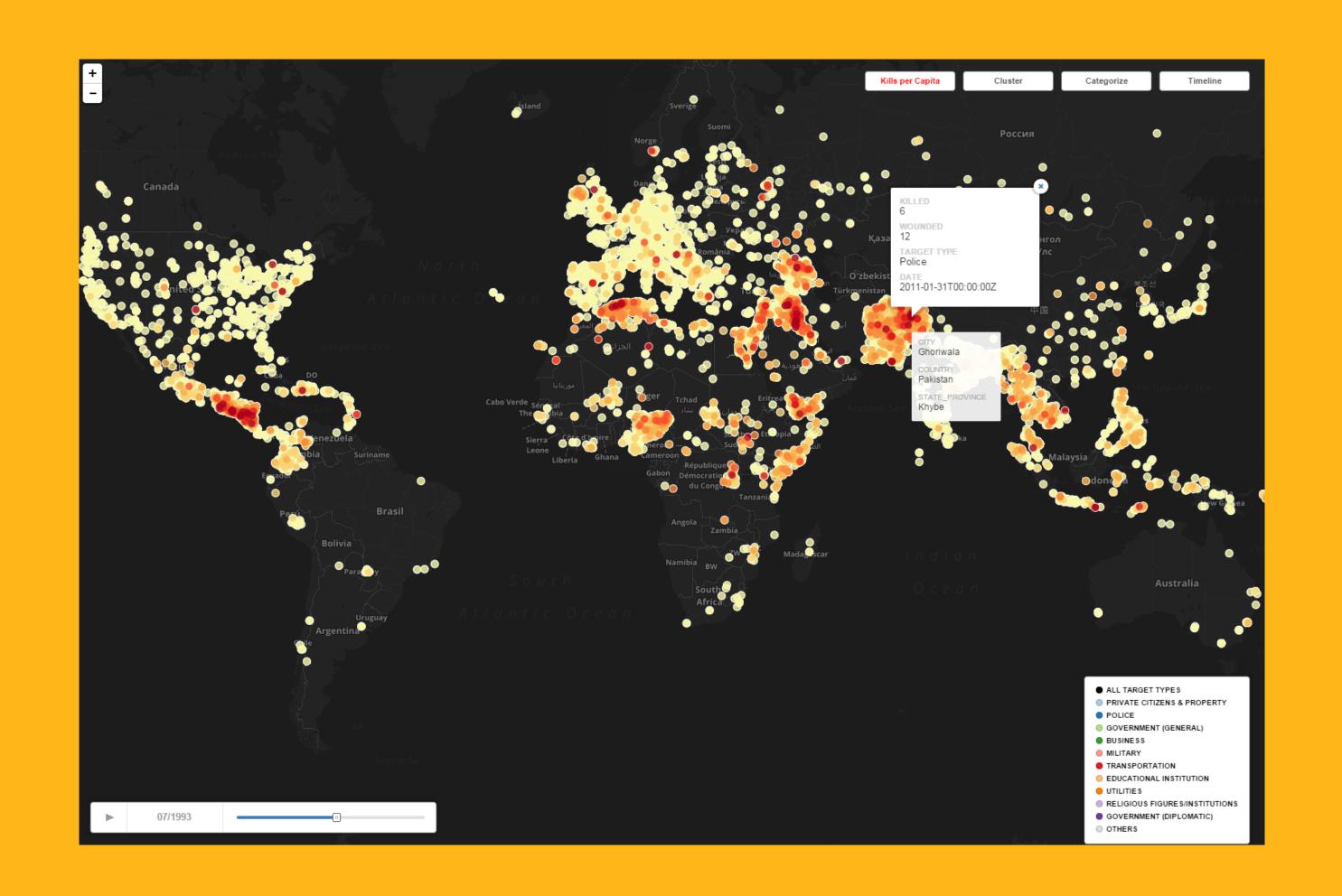
Purpose

- **Tasked with designing the visualization component, displaying the content provided by the extraction program**
- **Visualization outsourced to graphical data manipulating software**
- **CartoDB-** subscription-based mapping program, loads in tables from Excel
- **Sample data formatted into tables using scripts, synced with program**
- **Features provided using HTML and JavaScript.**

Features

- **Sample data given-** history of terrorist attacks
- **Features used: timeline (right), categorize (bottom-right), cluster, & kills per capita (bottom-left)**
- **Timeline plots each entity in order of date and has a scroll bar used to navigate**
- **Categorize color-codes all the entities depending on the target type associated**
- **Cluster groups together entity points that overlap based on the zoom of the map**
- **Kills per capita shows a heat-map of the affected areas, ranging from white for low numbers to red for high numbers**

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Make it real.