

PROFILE HIGHLIGHTS

- Observant analyst and researcher with 2 years experiences of **data mining**, **data visualization** and **rational database management** in **Computational Social Science** area; gaining familiarity with **statistical principles** and its application
- Principal contributor of 3 scientific projects funded by **NSF (National Science Foundation)**

EDUCATION

M.S. in Information Science (Big Data Analytics), University of Pittsburgh, Pittsburgh, PA

GPA: 3.61/4.00, May 2017

B.E. in Software Engineering, Xidian University, Xi'an, China

Major GPA: 3.45/4.00, July 2015

PUBLICATION

Su, Y., Robin, L., Lin, Y.-R., **Nuclear Incidents Visual Analysis for Anomaly Observing and Monitoring**, iConference 2018, 2017 (Submitted)

Su, Y., Lan, Z., Lin, Y.-R., Comfort, L., Joshi, J, **Tracking Public Response and Relief Following the 2015 Nepal Earthquake**, IEEE International Workshop on Collaborative Internet Computing for Disaster Management, 2016

WORK EXPERIENCE

Research Intern, University of Pittsburgh, Pittsburgh,

May 2017 – Oct 2017

- Combined with **machine learning** and **visualization techniques**, presented a comprehensive system to visualize **U.S. nuclear event**, then gave alarm for events classified as high suspicious by predictive classification model.
- Built user-friendly system to **track movements of U.S. policies**, helping researchers, public officials and relevant stakeholders understand how to balance the competing goals of innovation and consistency in public policy.

Research Assistant, University of Pittsburgh, Pittsburgh, PA

June 2016 – Jan 2017

- Novelty discovered causes of slow disaster recovery following **2015 Nepal Earthquake**, including gaps of pledged and paid donations, and regional inequity on supports distributions. Found patterns of **media response** and **disaster management**.
- Based on **2013 Boston Marathon Bombing**, test how emotionally potent **media coverage** of a real-world threat alters **threat perception**.

Teaching Assistant (Data Mining), University of Pittsburgh, Pittsburgh, PA

Aug 2016 – Apr 2017

PROJECTS

Tracking Public Response and Relief Following the 2015 Nepal Earthquake (funded by NSF) [link](#)

June 2016 – Sep 2016

- Retrieved news reports, transaction data, and citizen survey of 2015 Nepal Earthquake by **R language** and **Python**.
- Conducted analysis in **R platform** with 3 aspects: public response in news report, international and domestic support, and relationship between people's attitudes and reconstruction progress.

Anomaly Monitoring for National Nuclear Incidents in United States (funded by NSF) [link](#)

Mar 2017 – Sep 2017

- Structurized dataset. Tokenize event description text to corpus, then select features by calculating **TF-IDF**, **BNS score**, and **Chi-square test**;
- Apply machine classifiers of **one-SVM**, **SVM**, **Stochastic Gradient Descent**.
- Compared with standard method, ultimately improve **accuracy by 22%**, as well as **AUC value by 132%**.

Visual Analysis for Latent Networks of Policy Diffusion in United States (funded by NSF) [link](#)

Jan 2017 – Aug 2017

- Designed system mockup using **Sketch**.
- Applied NetInf algorithm in **R platform** to infer U.S. policy diffusion networks.
- Deployed and maintained network data, policy data, and metadata of each states into database using **MySQL** and **AWS**.
- Implemented geographical and hierarchical view Using **Python**, **d3.js**, **JavaScript**, and **HTML&CSS**.

Sushi: Visualization System for Exploring and Comparing World University Rankings [link](#)

Aug 2015 – Nov 2015

- Designed and built information visualization system to explore university rankings based on U.S. News and Q.S. datasets.
- Created visualizations (dual axes bar chart, parallel coordinates, scatterplot) using **AJAX technology**, **d3.js**, and **UI library jQuery**, **Bootstrap**.
- Helped research on Chinese education, awarded **Tarakanth Das Foundation Prize Award** for best paper written in 2017 academic year.

Media Perception Analytics Based on News Reports of 2013 Boston Marathon Bombing [link](#)

Sep 2016 – Nov 2016

- Retrieved URLs of **Google News** using **Python** and **R**.
- Utilized **jsoup** in **JAVA** to parse news URLs and collect contents for news article.
- Counted group of keywords in each articles to indicate how would they influence readers.