PO-MING "TERRANCE" LAW

Portfolio: https://terrancelaw.github.io
Email: miruappy@gmail.com

EDUCATION

Georgia Institute of Technology • Atlanta, GA Aug 2016 – May 2021

Ph.D. in Computer Science
Focus: Human-Computer Interaction and Data Visualization
Minor in Statistics

The Hong Kong University of Science and Technology • Hong Kong Sept 2012 – Aug 2016

B.Eng. in Computer Science
B.B.A. in General Business Management

PROFESSIONAL EXPERIENCE

Software Engineer • Google LLC • Sunnyvale, CA May 2022 – Present

- Working on web application for optimizing data center planning
- *Tech Stack: Angular, TypeScript, Java, Boq, Spanner*

Visualization Scientist • Epsilon Data Management, LLC • Chicago, IL Jun 2021 – Apr 2022

- Developed interactive dashboards for visualizing digital marketing data (e.g., clickstreams, path to purchase, and customer demographics)
- Implemented REST APIs in Express.js for querying clickstream data from a PostgreSQL database and converting the clickstream data into a tree representation
- Implemented algorithms for converted clickstream data into a tree-based data structure for visualization
- Integrated user data from multiple sources such as clickstreams, impressions, and referral traffic to infer consumer path to purchase
- The interactive visualizations I developed have been deployed to internal account analysts and sales teams
- *Tech Stack: JavaScript, TypeScript, React, Node.js, D3.js, Express.js, PostgreSQL, Python*

Research Intern • Adobe Inc. • San Jose, CA May 2019 – Aug 2019

- Created a web application that supported human-in-the-loop detection of machine learning biases by computing biases in performance measures such as classification accuracy, true positive rate, and false positive rate
- Published the work as two research papers in Graphics Interface 2020 and ACM SIGCHI 2020
- Filed a patent for our bias detection techniques and interface
- *Tech Stack: JavaScript, D3.js, Python, Flask*

Research Intern • Adobe Inc. • Seattle, WA May 2017 – Aug 2017

- Created and open-sourced full-stack software for visual analysis of event sequence data (https://github.com/terrancelaw/MAQUI)
- Interviewed analysts at Adobe to investigate their challenges in clickstream analysis
- Published the work as a research paper in IEEE VIS 2018
- *Tech Stack: JavaScript, D3.js, Python, Flask*

Research Assistant • Georgia Institute of Technology • Atlanta, GA Aug 2016 – May 2021

- Developed a dozen of front-end visualization systems through collaboration with diverse user groups such as healthcare informaticians, political scientists, and data analysts (Portfolio: https://terrancelaw.github.io)
- Evaluated visualization prototypes through user studies such as lab experiments and interviews and analyzed results using statistical methods (e.g., ANOVA and non-parametric tests) and qualitative coding
- Example project: Spreadsheet that supports intelligent and automated pairwise comparison
    - Developed a Google-Sheet-like spreadsheet prototype that supported automated pairwise comparison by logistic regression
    - Evaluated interface usability through a lab study with 16 participants
    - Published research in SIGCHI 2019
    - *Tech Stack: JavaScript, D3.js, jQuery*

SKILLS

Programming: React • TypeScript • D3.js • Node.js • Express.js • JavaScript • CSS • HTML • SVG • Python • PostgreSQL

Qualitative Research: Human-Centered Design • Interview • Surveys • Affinity Diagramming • Qualitative Coding • Prototyping

Quantitative Research: Usability Testing • Experiment Design • Statistical Analysis (e.g., ANOVA and regression) • R • SPSS

AWARDS AND HONORS

- Academic Achievement Medal (top 1% of graduates) • The Hong Kong University of Science and Technology • 2016
- Technology and Management Elite Student Scholarship • The Hong Kong University of Science and Technology • 2015
- Shanghai Commercial Bank Ltd. Scholarship • 2014
- Fung Scholarship • 2014
- The Cheng Foundation Scholarship • 2013
- The Dean’s List • The Hong Kong University of Science and Technology • Every Semester