Siwei "Robert" Li

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Education

Georgia Institute of Technology, Atlanta, GA   *2016 - 2020*
B.S. in Computer Science (GPA: 3.88/4.0) Highest Honor

Experience

Google, San Francisco, CA   *June 2020 - Present*
Software Engineer II (L3)
Building and improving mission-critical internal data pipeline systems.

Google, San Francisco, CA   *Summer 2019*
Software Engineering Intern
Built an RPC service and a web application adding explainability to a machine learning anomaly detection model in order to generate intuitive alerts for abnormal enterprise Google Doc access.

Georgia Institute of Technology, Atlanta, GA   *Fall 2017 - Present*
Undergraduate Research Assistant, School of Computational Science and Engineering
Advisor: Prof. Duen Horng (Polo) Chau
Member of the Polo Club of Data Science, where I innovate at the intersection of **data science and human-computer interaction (HCI)** to synthesize scalable, interactive, and interpretable tools that amplify human's ability to understand and interact with big data.

Panasonic Automotive Systems, Peachtree City, GA   *Summer 2017*
Software Engineering Intern
Developed an extensible analytics tool in **Java/Electron/React/d3** that enables engineers to create automated sequences that generate various analysis reports; estimated to **reduce 30% of testing time**.

Selected Publications

Argo Lite: Open-Source Interactive Graph Exploration and Visualization in Browsers   *CIKM'20*
Siwei Li, Zhiyan Zhou, Anish Upadhayay, Omar Shaikh, Scott Freitas, Haekyu Park, Zijie J. Wang, Susanta Routray, Matthew Hull, Duen Horng Chau
29th ACM International Conference on Information and Knowledge Management (CIKM'20), October 19–23, 2020, Virtual Event, Ireland.
Track: Resource

MLsploit: A Framework for Interactive Experimentation with Adversarial Machine Learning Research   *KDD'19*
Nilaksh Das, **Siwei Li**, Chanil Jeon, Jinho Jung, Shang-Tse Chen, Carter Yagemann, Evan Downing, Haekyu Park, Evan Yang, Li Chen, Michael Kounavis, Ravi Sahita, David Durham, Scott Buck, Polo Chau, Taesoo Kim and Wenke Lee
ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD). Aug 4, 2019. Anchorage, Alaska USA.
Project Showcase, Oral presentation

Mixed Reality for Learning Programming   *IDC'19*
Joonyoung Kim, Sudeep Agarwal, Kristina Marotta, **Siwei Li**, Jonathan Leo, Duen Horng (Polo) Chau
18th ACM Conference on Interaction Design and Children, Jun. 2019.
Poster, **Honorable Mention**

Shield: Fast, Practical Defense and Vaccination for Deep Learning using JPEG Compression   *KDD'18*
Nilaksh Das, Madhuri Shanbhogue, Shang-Tse Chen, Fred Hohman, **Siwei Li**, Li Chen, Michael E. Kounavis, Duen Horng Chau
ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD). Aug 19, 2018. London, UK.
Track: Applied Data Science **Audience Appreciation Award Runner Up**

Selected Skills

Languages: C++, Go, Java, Python, JavaScript (ES6+), TypeScript, Kotlin, Swift, SQL
Web: React, Redux, Node/Express, Electron, Django, Flask, CodeIgniter, HTML, CSS, JQuery
Mobile: Android, Cordova, iOS/ARKit
Data Science: Machine Learning (scikit-Learn, Tensorflow, numpy, pandas), Data Visualization (D3, matplotlib)
Miscellaneous: Infrastructure (Docker, Kubernetes, Vagrant), Build Systems (Gradle, Webpack, Travis CI)