Wei Lu

SENIOR SOFTWARE ENGINEER · PROJECT LEAD · DATA SCIENTIST

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Summary

- Effective project lead with excellent technical, analytical and communication skills
- Well-rounded, full-stack software engineer
- Highly effective data science practitioner in economics research context
- Programming language polyglot
- Conference speaker and active in regional developer communities

Experience

World Bank   *United States*

CONSULTANT   *Nov. 2020 - Current*

I'm currently working as a consultant on the Data and Evidence for Justice Reform (DE JURE) team. DE JURE is a collaboration between the World Bank's Governance Global Practice and the Development Impact Evaluation (DIME) team, aiming to establish a global data infrastructure for the justice sector and expand the evidence base on the economics of justice reform.

- Leading the project management and software development effort of Cadaster – a general-purpose data management and analytics platform
- Designing and carrying out impact evaluation through randomized controlled trials (RCTs) of web based interventions in various country context, including Peru, Kenya and France

Unit.IO   *Singapore*

CO-FOUNDER & SOFTWARE ENGINEER & DATA SCIENTIST   *Dec. 2018 - Dec. 2019*

I co-founded unit.io to build quality software and data science solutions for our academic and corporate clients.

Quantcast   *Singapore*

ENGINEERING TEAM LEAD   *Sept. 2014 - Nov. 2017*

Quantcast is a technology company that uses big data to make online advertising more relevant for end users and more effective for advertisers.

- Leading the ad services team responsible for advertising campaign data distribution to bidding servers
- Re-architecting the real-time bidding (RTB) configuration data pipeline – from a batch system to an update stream
- Primary on-call for operations of our globally distributed real-time bidding systems
- Two-time prize winner of the company hackathons

Hive Wallet   *Remote*

LEAD ENGINEER   *Jan. 2014 - Sept. 2014*

Hive brings secure, simple and cross-platform cryptocurrency wallet apps to the consumer market. As a company, Hive honors open source in their source code distribution, and decentralization in software design.

- Leading the frontend and backend development of hive-js, the web wallet that is designed for evergreen browsers
- Active, core developer on the most popular open-source bitcoin JavaScript library: bitcoinjs-lib
- Supervising development of hive-ios, the iOS app that wraps hive-js

Pivotal Labs   *Singapore*

SOFTWARE ENGINEER   *Dec. 2011 - Jan. 2014*

Pivotal is a global agile development consultancy. Fresh out of college, I was trained to become a consultant, and help our clients creating their app from scratch while building an engineering team with agile practices and principles.

- Leading engineering of client projects
- Full stack test-driven development of web services
- Building data pipeline with Amazon EMR and analytics tools
- DevOps with Heroku, Amazon EC2, S3 and CloudFront
- Providing training by pairing with client engineers

Education

Massachusetts Institute of Technology   *United States*

Master of Science   *Jan. 2018 - Jun. 2018, Jan. 2020 - Aug. 2020*

Program: Data, Economics, and Development Policy

National University of Singapore   *Singapore*

Master of Computing   *Aug. 2018 - Dec. 2019*

Program: Computer Science

- CAP: 4.58/5.00, First Class Honors
- Thesis: Learning Cooperative Solution Concepts from Voting behavior

National University of Singapore   *Singapore*

Bachelor of Computing   *Aug. 2007 - Dec. 2011*

Program: Information Systems

- Minors: Mathematics, Technology Entrepreneurship
- Dean's List Award (Top 5% of the cohort) for AY2009/2010 Semester 1 and AY2011/2012 Semester 1

Technical Skills

Web

- Web development using JavaScript, HTML5, CSS
- Experience with modern frontend and backend frameworks including: React, Django, Flask, Ruby on Rails
- Test driven development with unittest, Rspec, JUnit & Selenium
- Writing scripts in Bash script, Perl
- Analytics and visualization using Plotly and D3.js
- Proficient with DevOps on Heroku and AWS EC2

Database

- Proficient in writing complex SQL queries
- Ability to design and implement a complex relational database schema
- Familiar with versioned database
- Experience with PostgreSQL, MySQL, and NoSQL databases such as CouchDB and DynamoDB

Tools

- Programming languages in order of proficiency: Python, JavaScript, R, Java, Ruby, Bash, Perl, Stata
- Development with Vim, RubyMine, IntelliJ, and Eclipse
- Version Control using Git and Subversion
- Typesetting with LaTeX
- Comfortable with Linux (CentOS, Ubuntu, Fedora) and macOS operating systems

Community

Activities

2018	**Host**, JSConf Asia	*Singapore*
2018	**Organizer**, Global Diversity CFP Day	*Singapore*
2017-2019	**Organizer**, Singapore JS Book Club (Weekly Meetups)	*Singapore*
2012-2015	**Organizer**, Singapore JS Meetup Group (Monthly Meetups)	*Singapore*

Conference Speaking

2014	**JSConf Asia**, HTTP Headers: the Simplest Security	*Singapore*
2014	**CampJS**, Bitcoin Workshop	*Brisbane, Australia*
2014	**Global Bitcoin Summit**, Peatio: an Open-source Crypto Currency Exchange	*Beijing, China*
2013	**RubyConf China**, Writing expressive tests with RSpec	*Shanghai, China*
2012	**Red Dot Ruby Conf**, A Journey into Pair Programming	*Singapore*