Zhuoran Yu

https://yuzhuoran.github.io | Phone: +1 (470) 334-5217 | Email: zhuoran.yu@gatech.edu

EDUCATION

Georgia Institute of Technology Aug. 2016 – Dec. 2018 (expected)

- M.S in Computational Science and Engineering (GPA: 3.84 / 4.0)
- *Selected Courses:* Computer Network, Database Systems, Machine Learning, Mobile Apps and Service, Simulation and Modeling (Teaching Assistance), Operating Systems, Intro to Java Programming

Peking University Sept. 2012 – June 2016

- B.E in Energy Resources Engineering (Rank 4 / 19, GPA: 3.55 / 4.0)

WORK EXPERIENCE

Electronic Arts Inc. May 2018 – Aug. 2018

Software Engineer Intern Austin, TX

- Worked in Data Platform to build a web application from scratch to expedite data ETL development. The app provided an efficient Hadoop Oozie generation workspace for EA data ETL team;
- Developed a web UI with multiple complex functional forms and tables for users to develop ETL task, replacing manual efforts in Editor with **~4** times more efficiency. (**Angular 6)**
- Built a backend server with RESTful APIs and services to provide game data query and Oozie generation by parsing SQL and configuration from JSON with Java template API. **(Spring Boot)**
- Optimized MySQL table structure and JSON serialized/deserialized method to map ETL metadata to database. This saved more than **70%** storage with flexible database schema. **(JPA, MySQL**)
- Conducted unit test for repository, service modules and MVC layer to ensure app work as expected.
- The application successfully saved **80%** ETL development time and reduced **100%** semantic error.

XtalPi Inc. Jun. 2017 – Aug. 2017

Machine Learning Engineer Intern Beijing, China

XtalPi is a pharmaceutical technology company to provide cloud-based computational service for drug Industry.

- Worked in the algorithms group to develop machine learning algorithms to predict molecule properties.
- Implemented matrix based and bag-of-words based model to extract features for data pre-processing.
- Developed machine learning algorithms of Kernel Ridge Regression, Random Forest, ElasticNet and Bayesian Regression to predict properties based on experiment data. (NumPy, SciPy, scikit-learn)

SELECTED PROJECTS

IoT Mobile App for Plants Lover http://plantism.herokuapp.com/index.html Jan. 2018 – May 2018

- Designed and developed a mobile app with wireless sensor to provide remote monitor and care instruction for plant lovers in a team of six, including UX designers and product manager.
- Built an Arduino sensor module to collect plant soil monitoring data and uploaded to server. (**Firebase**)
- Led the Development of the **Android** app for both UI and backend. The app bound sensors and fetched monitoring data from Firebase to provide real-time alert, growth trend visualization and care tips.
- Implemented relational/NoSQL database (**SQLite/Realtime Database**) to store user and plants data.

MapReduce Distributed System Infrastructure Sept. 2017 – Dec. 2017

- Designed and Implemented a simplified version of MapReduce infrastructure for local machine.
- Implemented master process with dispatch algorithms to maintain the intermediate file information in local disk and manage worker server to execute map/reduce tasks by remote procedure call. (**gRPC)**

SKILLS

Programming Languages: Java (Primary), Python, C/C++, JavaScript, Typescript, HTML5/CSS, SQL

Web & Mobile Development: Spring Boot, Node.js, Angular, AngularJS, Android Studio, Firebase, MySQL

Tools & Frameworks: Git, Jira, SQL workbench, Linux Shell Scripting, Junit, Maven, D3.js