Zhuoran Yu

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EDUCATION

Georgia Institute of Technology, College of Computing   **Aug. 2016 – Dec. 2018 (expected)**
- M.S in Computational Science and Engineering (GPA: 3.84 / 4.0)

Peking University, College of Engineering   **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 the EADP Data & AI team to build a web-based application to expedite data ETL development timeline by enhancing engineer productivity on Hadoop Oozie job files generation.
- Developed a web for users to browse business logic data and create data transformation job files with inputs and selectors in a more efficient way to save time from manually typing in Text Editor. (**Angular 6**)
- Built a resource server with RESTful APIs to provide business data query and generate job files by parsing SQL source code and configuration from JSON with Java template engine. **(Spring Boot, FreeMarker)**
- Designed job file data structure and built a database for CRUD operation with JPA. **(Hibernate, MySQL**)
- Saved **80%** ETL development time and reduced **100%** semantic error in SQL source code.

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)**
- Achieved algorithms with less running time of DFT method while maintaining similar prediction accuracy.

PROJECTS

Mobile Chat App   **Jul. 2018 – Oct. 2018**
- Built a fully functional **iOS** chat app for users to communicate with friends. (**Swift, Firebase**)
- Provided individual and group chats, also supported auth login, multimedia messages and notification.
- Implemented NoSQL database (**Cloud Firestore**) to store chat and user information data.

IoT Mobile App for Plants Lover (Intro: **http://plantism.herokuapp.com/index.html**)   **Jan. 2018 – May 2018**
- Designed and developed a smart plant pot with mobile app to provide wireless sensor remote monitoring and professional care instruction to help people take care of their plants in a group of six.
- Built an Arduino sensor module to continuously collect soil temperature and humidity information, then parsed and uploaded real-time data in JSON to app server through WIFI module. (**Firebase**)
- Developed an **Android** app to bind sensors and fetch monitoring data asynchronously and provided trend visualization, plant care tips with interactive UI to improve user experience. (**Android Studio, XML**)
- Implemented relational/NoSQL database (**SQLite/Realtime Database**) to store user data and plants wiki.

MapReduce Distributed System Infrastructure   **Sept. 2017 – Dec. 2017**
- Designed and Implemented a simplified version of MapReduce infrastructure for local machine. (**C++**)
- 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 & COURSES

Programming Languages: Java, Python, C/C++, Typescript, JavaScript, HTML5/CSS, MySQL, Swift
Tools & Frameworks: Junit, git, Jira, maven, d3.js, Spring Boot, AngularJS/Angular, gRPC, Firebase
Selected Courses: Computational Algorithms, Advanced Operating Systems, Intro to Java Programming, Computer Networks, Database Systems, Machine Learning, Artificial Intelligence, Mobile Apps and Services