

Fuyao Li

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EDUCATION

University of California, Irvine

Department of Computer Science, MS in Networked Systems GPA:3.74/4

Irvine, California

Sept. 2018 - Jun. 2020

South China University of Technology

BS in Electrical and Computer Engineering - Elite Class GPA: 3.53/4

Guangzhou, China

Sept. 2014 - Jun. 2018

SKILLS

- **Languages:** Java, JavaScript/ES6, C#, Python, C, C++, HTML5/CSS3, Bash Scripting.
- **Frameworks:** Spring, Spring Cloud, MyBatis, Maven, ASP.NET, Autofac, LINQ, NSubstitute, Express, NPM, GraphQL, Flask, RabbitMQ, Kafka, Kubernetes, Docker, JQuery, Bootstrap, Thymeleaf, scikit-learn, Numpy, Keras, JMeter, Junit
- **Databases & Tools:** MySQL, Redis, MongoDB, RethinkDB, CosmosDB, Git, Postman, AWS, Google Cloud Platform, Tomcat
- **Knowledge:** OOP/OOD, Design Patterns (MVC, Factory, Proxy, Pub/Sub), Test-driven Development(TDD)

WORK EXPERIENCE

Microsoft, Software Engineer Intern

Jun. 2019 - Sept. 2019

O365 MyAnalytics Meeting Category Feedback Insight Microservice

- Implemented a microservice (> 1000 lines) for a new insight to collect meeting category feedback, which will be used to evaluate meeting category AI model and improve the major insight experience of **MS Workplace Intelligence**.
- Built the backend service with multiple modules including compute unit, store accessors, REST API extensions and actions using **C#, .NET, ASP.NET MVC** and **Autofac** inside **Microsoft Outlook**.
- Integrated Microsoft **Connectors**, **1Engine** service to interact with **MS RESTful Substrate API** to visualize actionable **Adaptive Card** on Outlook platform to collect user feedback.
- Extracted feedback logs on **CosmosDB** and automated the analysis process using **U-SQL** to generate model accuracy report.
- Realized **TDD** by completing 30 **Unit Tests**, **Integration Tests** (> 2000 lines) based on **NSubstitute & Topology Deployment Service(Internal test platform)** and deployed the insight into production to **Worldwide Microsoft employee's Outlook**.

Ardent Labs, Software Engineer Intern

Feb. 2019 - Jun. 2019

Node.js and React based Online Teaching Management Platform

- Built backend service for online teaching management platform using **Node.js, Flow, TypeScript, ReQL**.
- Implemented 20 query and mutation endpoints based on **Express, Apollo Platform, GraphQL API** supported by **RethinkDB**.
- Realize **Agile development** with **JIRA** and delivered 10 features including article postings, student grade update automation.

Accenture, System Analyst Intern

Jul. 2018 - Sept. 2018

Spring based Chinese Chemistry e-commerce Trading Platform

- Coordinated with clients and dev team to design the architecture of the website with **Spring, Thymeleaf** and **Alibaba HSF**.
- Designed core **interactive prototype** (> 40 pages) of sales promotion section including "seckill" shopping, differential pricing policy, add-on policy with **Axure**, documented **software development specifications** and summarized workflow with **Visio**.

Yihuan Software Technology Company, Software Engineer Intern

Mar. 2018 - Jun. 2018

Spring and IoT based Stage Lighting Management System

- Developed a **Restful** website backend for a stage light company based on **Spring, SpringMVC, MyBatis**.
- Implemented the frontend with **JavaScript, jQuery, Ajax** and beautified the webpage with **CSS, Bootstrap & DataTables**.
- Developed **TCP** module based on **Socket** to set up connection with IoT device and solved **sticky package problem** caused by intensive data transmission and achieved performance improvement from 75% to 99.9%.

SELECTED PROJECTS

Fablix Movie Web Application (Similar to Netflix)

Dec. 2018 - Mar. 2019

- Built a **Java** web application selling movies to support browsing, ordering and managing based on **Springboot, Spring Data JPA**.
- Scaled **MVC application**(Controller, Service, Dao) with **MySQL master-slave replication, stored procedures, Nginx** for load balancing, **connection pooling, Redis** for caching, **sticky session** and deployed on **AWS EC2** with **Docker**.
- Performed **stress test** using **Apache Jmeter** and tested average query time in multiply threads mode.
- Realized **DOM Parser** with Stanford movie dataset, filtered inconsistent data and loaded 12000 movies into **MySQL** in 5 secs.
- Interacted with **web UI** and a corresponding **Android UI** and secured website with **reCAPTCHA** and **Spring Security**.
- Enabled password reset and user registration through email with **AWS Simple Email Service(SES)** and **RabbitMQ**.

Keras based Emotion Classification System

Nov. 2018 - Dec. 2018

- Utilized **Keras API** and VGG16 Net which has been pre-trained by **ImageNet** to processed more than 13000 pictures with 8 kinds of emotions, reduced the feature dimensions from 367500 to 512 on **Google Cloud Compute Engine**.
- Implemented a 9-layer **CNN**, took measures including adding **dropout layers**, increasing **dropout rate**, using **binary cross entropy** to reduce overfitting and realized **91.18% training accuracy** and **87.17% estimation accuracy** based imbalanced data.
- Trained the model with **SVM, Decision Tree, Random Forest** using **Numpy, scikit-learn** and analyzed the performance metrics with CNN.

AWARDS

Microsoft 2019 Hackathon: Worldwide 1st Place in Hack for Industry Topic

Aug. 2019

- Won the award with a **block chain** Project "**Smart Contract in Manufacturing Industry**" aiming at solving practical challenges faced by Microsoft Surface supply chain system based on **Ethereum truffle framework, Node.js, Webpack, React**.