Shukan (Maxwell) Yang

Year 4, Honours Computer Science, Software Engineering Option

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TECHNICAL SKILLS

github.com/Maxwell-Yang-2001

Programming: Java, C/C++, C#, JavaScript (TypeScript), Rust, Python, Dart, Assembly Web: HTML, CSS / SCSS, XML, PHP, jQuery, React.js, Vue.js, Express.js

Mobile: Android, iOS (Objective-C), React Native, Flutter

Database/testing: MySQL (SQL), MongoDB (NoSQL), JUnit, Mocha, Cucumber, Cypress, Selenium

Cloud: AWS, Firebase

Tools/Environments: Git, Node.js, Postman, Docker, Kubernetes, Github Actions

WORK EXPERIENCES

Software Developer, SAP (full time, co-op)

Sept 2021 - Current

- Engaged in the development and maintenance of multiple repositories for the App Center product in SAP Concur, with involvements in the MERN stack and Docker containerization
- Experienced responsibilities of a QA by reconstructing the unit tests, integration tests, and E2E tests, which are integrated into the development pipeline
- Participated in the deployments into multiple data centers with Kubernetes
- Documented the full API endpoint set used with OpenAPI (Swagger) and user stories with diagrams
- Presented short demos for features or addressing issues frequently in biweekly sprint meetings

Computer Science Research Assistant, UBC (full time, co-op)

May 2021 - Aug 2021

- Worked on understanding the current information required by Prusti (a verification tool for Rust)
- Implemented different designs for data type representations of a Rust program and decouple much of Prusti's translation logic from the specific workings of the Rust compiler

Mobile Software Developer, PDFTron (full time, co-op) Link

Sept 2020 - Apr 2021

- Developed and maintained React Native and Flutter wrapper for PDFTron SDK, in Android (Java), iOS (Objective-C), React Native (JavaScript/TypeScript) and Flutter (Dart)
- Wrote scripts for higher automation in mobile development cycle
- Contributed to and supported technical documentation for products
- Provided customer technical support (issues, tickets) for mobile SDK
- Participated in technical/design reviews and group problem solving activities

Computer Science Teaching Assistant, UBC (part time)

Sept 2019 - Jun 2021

- Assisted students in course materials during labs and tutorials
- Designed pre-class assignments, quizzes and exams for the courses
- Answered questions asked by students on online forum (piazza)

TECHNICAL PROJECTS

ACADEMIC

Employee Directory Viewer (8-person, project manager) Link

Jan 2021 - Apr 2021

 Applied a combination of waterfall and agile methodology, built a serverless employee directory application for Associated Engineering

- Contained a search page with filters and sorting function, dynamically generated org chart, and contractor information editing page
- Implemented front-end with React.js and Material-UI, which was hosted in S3 and connected to the C# back-end through API gateways
- As the project manager, regularly hosted meetings, documented plans, requirements and progress in JIRA to ensure high work flow

Application Manager (3-person)

Jan 2020 - Apr 2020

- Constructed a website for mobile application analysis with database, which provides functions such as rating, sorting, and viewing application in userdefined order
- Realized client-side behaviors with HTML, CSS, JavaScript, server-side with PHP and MySQL for query handling

Fundamental Racket Compiler (3-person)

Jan 2020 - Apr 2020

- Created a Racket/Scheme-based compiler that parses Racket codes and translates it into executable x86 assembly code by passing through more than 20 levels of compiling
- Explored multiple low-level aspects of Racket, from basic data structures such as vectors and pointers, to complex code structures such as recursions with local variables of varying life-cycles

PERSONAL

Online Team Communication Tool (1-person)

Dec 2020 - Current

- An online platform which allows team members to communicate in configurable channels in real-time
- With Node.js, front-end was built using React.js, while back-end was built with Express.js and MongoDB

COMPETITIONS

<u>IEEEXtreme Programming Competition 13.0</u> (3-person)

Oct 2019

- Team (with 2 other team members) ranked 1st among all 55 teams in Canada, and top 5% globally
- Solved problems mainly about algorithm design and data structures in 24 hours

EDUCATION

Bachelor of Science

Sept 2018 – Apr 2023 (Expected)

Vancouver, BC

The University of British Columbia (UBC)

- Major: Honours Computer Science, Software Engineering Option
- Current Year Standing: 4
- GPA: A
- Awards: UBC Dean's list, UBC Science Scholar, UBC Trek's Excellence scholarship (top 5%)
- Courses (grade, average): Intermediate Algorithm Design and Analysis (98, 86), Computer Hardware and Operating Systems (92, 81), Software Construction (98, 74), Models of Computation (99, 75)