

Shukan (Maxwell) Yang

Year 4, Honours Computer Science, Software Engineering Option

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github.com/Maxwell-Yang-2001

maxwell-yang-2001.github.io

TECHNICAL SKILLS

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, 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
<ul style="list-style-type: none">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 containerizationExperienced responsibilities of a QA by reconstructing the unit tests, integration tests, and E2E tests, which are integrated into the development pipelineParticipated in the deployments into multiple data centers with KubernetesDocumented the full API endpoint set used with OpenAPI (Swagger) and user stories with diagramsPresented short demos for features or addressing issues frequently in biweekly sprint meetings	
Computer Science Research Assistant, UBC (full time, co-op)	May 2021 - Current
<ul style="list-style-type: none">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
<ul style="list-style-type: none">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 cycleContributed to and supported technical documentation for productsProvided customer technical support (issues, tickets) for mobile SDKParticipated in technical/design reviews and group problem solving activities	
Computer Science Teaching Assistant, UBC (part time)	Sept 2019 - Apr 2020
<ul style="list-style-type: none">Assisted students in course materials during labs and tutorialsDesigned pre-class assignments, quizzes and exams for the coursesAnswered questions asked by students on online forum (piazza)	

TECHNICAL PROJECTS

ACADEMIC

Employee Directory Viewer (8-person, project manager) Link	Jan 2021 - Apr 2021
<ul style="list-style-type: none">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 user-defined 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

IEEEExtreme Programming Competition 13.0 (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)

The University of British Columbia (UBC)

Vancouver, BC

- **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)