Fei Kuan

Computer Engineering Student

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TECHNICAL SKILLS TECHNICAL PROJECTS

Most Experienced

- Java, Kotlin
- Git
- Python
- PowerShell
- HTML/CSS, JavaScript
- Solidity
- SystemVerilog
- Android Studio
- Linux Server, Apache

Some Experiences

- C, C++, C#
- PyTorch
- ARM Assembly
- VMware ESXi, Proxmox
- pfSense, BIND, RADIUS
- Docker
- Bamboo Cl

EDUCATION

Expected May 2025
aScript): 91%
81%
a): 80%
August 2023 – December 2023
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TECHNICAL WORK EXPERIENCE

Nippon Telephone and Telegraph Corporation, Tokyo, Japan Network Service and Web3 Research Internship

- Researched and Reported the latest developments of Web3, including smart contract, dApps, new blockchains, and Level 2 scaling.
- Written an IEICE conference paper and presentation on a new mobile carrier payment model that enables new payment possibilities such as micropayments, through blockchain smart contracts.
- Created proof-of-concept of said model for demonstration, benchmarking, and further developments.
- Contributed to the continuing development of this model, including investigating the possibility of replacing SIM cards with decentralized authentication schemes.

January 2022 – April 2022

• Designed hardware to output images with effects using SystemVerilog and worked on embedded Linux image processing, in a team project to create AI-enabled restaurant promotional display with Twitter images.

Android Apps, Personal Project

Twitter FoodShow, UBC

July 2018 – Present

- Developed two Android apps with over 20,000 combined downloads on Android Studio using Java and Kotlin.
- Streak Alarm: help users keep Snapchat streaks with periodic reminders.
- Chinese Converter: convert between Traditional and Simplified Chinese.
- Regularly implementing new features based on user suggestions.
- Project pages: <u>Streak Alarm</u>, <u>Chinese Converter</u>
- Home Server, Personal Project

- January 2018 Present
- Planned and built a virtualized home server to provide services such as web hosting and VPN, with self-taught knowledge on pfSense, BIND, Apache, RADIUS, and StrongSwan.
- Introduced VLAN, separating family, guest, and server traffic.
- Kept maintained and constantly used to experiment with new software and services.

January 2024 – August 2024

Motorola Solutions - Avigilon, Vancouver, Canada

Systems Engineering Co-op

- Recommended the hardware configuration of next generation hardware appliances that balances performance goals and costs, through performance testing and data analysis.
- Improved performance testing tools using Python and PowerShell, reducing manual labor by over 30%.
- Led a project creating customized Windows OS image for appliances to provide best user experience.
- Designed automated verification of testing tools with Bamboo to ensure correctness.
- Increased testing reproducibility by migrating from real-world to simulated workload, using Docker.
- Contributed to the discussion on testing infrastructure upgrades to support latest product offerings.

ENGINEERING STUDENT TEAMS

Subbots, University of British Columbia, Vancouver, Canada

 Created Docker images of the software environment for our autonomous underwater vehicle, allowing easier deployment and management. The adoption of the infrastructure-as-code approach using Git and Dockerfile enabled software infrastructure versioning and increased consistency.

AWARDS AND SCHOLARSHIPS

University of British Columbia Trek Excellence Scholarship	2022
University of British Columbia Dean's Honour List	2020 - 2022
Macau Education and Youth Development Bureau Scholarship	2019 – 2023

INTERESTS AND ACTIVITIES

- Associated Board of the Royal Schools of Music (ABRSM) Grade 8 Piano
- Wikipedia editing
- Radio enthusiast: Over-the-air TV receiving, shortwave, software defined radio
- Long-distance running, volunteering
- Transit enthusiast

May 2022 - Present