

# EUNSONG KOH

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## EDUCATION

### Simon Fraser University

Bachelor of Science, Computer Science

Expected Graduation April 2027

Vancouver, BC

- **Relevant Coursework:** Database Systems, Systems Programming, Networking, Computational Data Science, Data Structures & Algorithms

## EXPERIENCE

### Applied Research Engineer

Safety CLI Cybersecurity | Pre-Series A (Backed by First Round Capital & Kearny Jackson)

Jan 2026

Vancouver, BC

- Incoming Applied Research Engineer (AI & Security)

### Software Engineer Intern

Safety CLI Cybersecurity | Pre-Series A (Backed by First Round Capital & Kearny Jackson)

May 2025 - Dec 2025

Vancouver, BC

- Built a **full-stack vulnerability analysis platform** using **FastAPI + React**, leading 90% of frontend development; accelerated security reviews 4× and improved team productivity 16%
- Engineered and productionized a **high-performance call-graph traversal algorithm** for vulnerability detection (50k+ nodes in under 1 second) in the data engine, enabling scalable, real-time system analysis
- Developed an **ML-powered data licensing and evaluation pipeline** using **Hugging Face Transformers, LangChain, LangSmith**, orchestrating **distributed training on AWS EC2** with Ray Train/Tune and Accelerate, achieving 92% accuracy on unstructured data and reducing model training time by 25%

### Undergraduate Research Assistant

Reliable Systems Lab | Simon Fraser University

May 2025 - Aug 2025

Vancouver, BC

- Co-authored research on **LLM-based automated vulnerability discovery and repair** supervised by Dr. Steven Ko
- Applied advanced **prompt engineering** techniques to improve model-guided detection by 10%
- Developed **benchmarking pipelines** for Rust vulnerabilities using LangChain and LangSmith, increasing detection coverage and reliability

### Software Developer & Product Manager

Community Based Rehabilitation Team | Simon Fraser University

Jan 2025 - Apr 2025

Vancouver, BC

- Designed and implemented a **user history tracking endpoint** and corresponding **React/React Native dashboard** as part of a research initiative under Dr. Brian Fraser, developing a NGO-backed app on the **Google Play Store**
- Redesigned core **Django** data models with **PostgreSQL** and refactored backend and **React/React Native** systems, improving query efficiency by **15%** and frontend performance and maintainability by **13%**
- Authored **PRDs**, designed **Figma** prototypes, and collaborated with developers and clients to deliver **3 new features** on schedule

### Software Engineer Intern

Kelowna Software Ltd.

May 2024 - Aug 2024

Remote

- Refactored and optimized legacy code, increasing **performance by 5%**, improving **readability by 15%**, and enhancing maintainability and test coverage (+20%) using **XUnit** and **Jasmine** across internal and client software
- Automated **large-scale ML data pre-processing** using **Python, Pandas, and Dask**, reducing data sorting and transformation time by **70%**
- Developed back-end systems in **C#/.NET Core** and client-facing features with **TypeScript/Angular** for **1000+** users

## PROJECTS

### AutoJob | AWS Step Functions, DynamoDB, AWS Bedrock, EventBridge, GitHub Actions

- Built a **serverless job tracking platform** with AWS Step Functions and DynamoDB, orchestrating scalable pipelines for automated notifications and state management
- Integrated **AWS Bedrock** for relevance-based classification, **EventBridge** for scheduled notifications, and automated **CI/CD pipelines with GitHub Actions** for reliable large-scale execution

### UWaterloo Hack the North 2025: vybes - Link | AWS Lambda, DynamoDB, API Gateway, Next.js, OpenCV, Grok API

- Built a **live crowd sentiment and music recommendation engine** using OpenCV and Grok API, fully integrated with DJ software
- Developed a **Next.js dashboard with WebSockets** via AWS Lambda, DynamoDB, and Gateway for real-time audience voting and analytics

## EXTRACURRICULARS

### Director of Communications & Multimedia

SFU Developers & Systems Club

Feb 2023 - Present

- Co-founded the SFU Developers & Systems Club and led marketing, events, growing membership to **400+** in 3 years, boosting engagement by **15%**, follower base by **9.6%**, and designing the club website with **Figma, React.js**, and **Tailwind**

## TECHNICAL SKILLS

**Languages:** C, C++, C#, Python, Java, SQL, JavaScript, TypeScript, Swift, HTML/CSS

**Frameworks/Libraries:** .NET, Angular, React.js, Next.js, Redux, Django, JUnit/XUnit, Pandas, Bootstrap, TailwindCSS, SwiftUI

**Developer Tools/Technologies:** AWS, Azure, LangChain, HuggingFace, MongoDB, Docker, Git, Github Actions, Figma