

Matthew Andersen Haryanto

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EDUCATION

University of British Columbia

Sept. 2023 – May 2028

B.Sc. Combined Major in Computer Science and Statistics

Vancouver, Canada

Computer Science Undergraduate Teaching Assistant

Relevant Coursework: *Software Engineering, Databases, OOP, Data Structures and Algorithms, Computer Systems*

EXPERIENCE

Software Developer, AI Co-Op (Incoming)

Sept. 2026 – April 2027

Motorola Solutions (Avigilon)

Vancouver, BC

Software Developer Co-Op

May 2026 – August 2026

Rockland Scientific

Victoria, BC

- Built admin CRUD panels in **ASP.NET Core** and **Next.js** with pre-filled modals and a staged deletion safeguard to prevent accidental data loss.
- Diagnosed and fixed a threading bug where static database context fields were shared across concurrent API requests, by replacing them with properly scoped dependency-injected instances.
- Drove a full-stack migration from integer primary keys to stable string tokens across **10+** API controllers and the database schema, ensuring no client-side breakage across **7 affected services**.
- Rebuilt the layout and drag-and-drop system of a desktop data visualization app built in **Electron**, fixing a bug that silently deleted user chart configurations for **50+ daily active users**.
- Implemented null-value compression in a **Julia** data pipeline, significantly cutting data transfer for large, sparse sensor datasets.

Quantitative Developer

Oct. 2025 – Present

UBC Trading Group

Vancouver, Canada

- Engineered **Sauder's first ever live trading simulator** using **Python + FastAPI** with async WebSocket streaming, supporting **30+ concurrent users** with **99% uptime** during live testing sessions.
- Designed RESTful APIs and algorithms for order book, portfolio tracking, PnL, and analytics used by automated trading bots and internal admin dashboards.
- Containerized the system using **Docker** and deployed on AWS EC2, improving development speed and preventing deployment errors.

Fullstack Web Developer

July 2024 – April 2026

Gado-gado Indonesian Student Association UBC

Vancouver, Canada

- Built a membership dashboard supporting **60+ club members** with **PostgreSQL**, enabling online payments and RSVP management that replaced Google Forms.
- Refactored the webpage UI with **React** to modernize the design, resulting in a **146.8%** increase in traffic.

TECHNICAL PROJECTS

Homee 🏠 | *React Native, PostgreSQL, ASP.NET Core, AWS*

Nov. 2025 - April 2026

- Architected a full-stack mobile food marketplace using **React Native** and **ASP.NET Core** with **PostgreSQL**.
- Built paginated product listings with search/filter, image uploads, and an AI moderation layer to validate seller kitchen compliance before listings go live.

b.env - [NwHacks '25 Best Security Hack] 🔗 | *Next.js, Go, RabbitMQ, Solidity*

Jan. 2025

- Developed a decentralized API key sharing service to address security threats, leveraging blockchain to prevent over **12 million** annual API key exposures.
- Integrated MetaMask, enabling secure **100%** decentralized API key storage and user authentication.

TECHNICAL SKILLS

Languages: C#, C/C++, Go, HTML5/CSS, Java, JavaScript, JSON, Julia, PHP, Python, R, SQL, TypeScript

Frameworks: .NET Core, Docker, Express, FastAPI, JUnit, Next.js, Node.js, PostgreSQL, React, Stripe, TailwindCSS

Developer Tools: Amazon Web Services, Azure, Blender, Claude Code, Git, IntelliJ, Visual Studio, VS Code

