

EXPERIENCE

Software Engineer – WiseTech Global

Nov 2024 - Present

Working on CargoWise, a cloud logistics platform used by 18,000+ organizations for freight forwarding, customs, and transport operations. Focus: automation workflows, integrations, and data infrastructure.

Backend & Architecture *C#, .NET, SQL, Rules Engine*

- Built resource allocation system with dynamic units, improving space utilization tracking by **40%**
- Automated manual classification workflows using business rules engine, saving customers **2-3% data entry time**
- Fixed critical pricing bug affecting multiple customers by refactoring code to use granular-level aggregation

Integration & Platform Development *C#, REST APIs, Full-stack*

- Migrated **2 shipping provider integrations** to internal logging platform, enabling real-time observability
- Refactored data import/export functionality to support multiple client configuration types

Software Engineer – Optiver

Jan 2023 - Oct 2024

Part of Automating Trading Risk (ATR) team building infrastructure for trade databases, pre-trade limits, and risk management systems processing millions of trades daily.

Architecture & Risk Systems *C++, C# (Full-stack)*

- Re-architected short-sell protection stack enabling filters by trading strategy (**\$15M USD annual revenue**)
- Developed application for dynamic borrow requests during trading, enabling covered short selling
- Corrected worst-case exposure calculation by **\$600M USD** through refined logic and notional pool limits
- Modernized stack by offloading calculations to backend, achieving **15% faster GUI load times**

Database & Automation *C++, Postgres, SQL, Docker, APIs*

- Built one-click automation integrating issue tracking and messaging platforms for direct GUI management
- Implemented parallel dependency graph traversal to optimize database deletions and prevent deadlocks, reducing execution time from **1.5 hours to 4 minutes (96% reduction)**
- Dockerized production trade database for testing, reducing build times from **25 to 4 minutes (84%)**
- Eliminated manual accounting overhead by automating monthly trade count reports for tax compliance

Software Engineer, WiseTech Global (Part-time)

Aug 2022 - Nov 2022

- Contributed to ContainerChain product, working across mobile and web stacks using Ionic, Angular, and C#

Software Engineer Intern – Optiver

Dec 2021 - Feb 2022

- Built a C++ application that cross-references external trading exchange calendar sources and alerts traders to discrepancies, removing manual calendar management and extending coverage to 2050 across all markets

SIDE PROJECTS

PhysioEase (GitHub)

2025

- Consulted with physiotherapists to build 3D visualization platform using Three.js/WebGL for patient education
- Helps medical professionals explain complex anatomical concepts to patients, improving treatment understanding

Loopless (GitHub)

2024

- Anti-addiction mindfulness platform with **100+ users** featuring physics-based games (Ripple, Strings, Tap) to interrupt anxiety spirals; built with Phaser 3/React/Next.js and deployed to iOS via Capacitor
- Designed without ads or notifications, prioritizing user wellbeing over engagement metrics

EDUCATION

Bachelor of Computer Science (Advanced), GPA: 6.9/7

Dec 2022

The University of Adelaide — VP, Competitive Programming Club (2021-2022)

KEY STRENGTHS

Languages & Frameworks: C++, C#, Python, SQL, TypeScript, JavaScript, React, Angular, Three.js

Tools & Platforms: Docker, Postgres, Grafana, Git, AWS/GCP, CI/CD, TimeScaleDB, Next.js

Collaboration: Stakeholder management, consulting with domain experts, technical communication