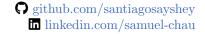


Samuel Chau



EDUCATION

University of Adelaide

Adelaide, SA

Bachelor of Computer Science, Major in Cybersecurity

Feb 2022 - Nov 2025 (Expected)

- GPA: **6.6/7.0** (High Distinction average)
- Cybersecurity Courses: Cybersecurity Fundamentals (HD), Secure Programming (HD), Software Engineering & Project - Cybersecurity (HD)
- Core CS Courses: Algorithms & Data Structure Analysis (HD), Object Oriented Programming (HD), Web & Database Computing (HD), Operating Systems (D), Computer Networks (D)

EXPERIENCE

Dictionarry (7)

React, Next.js, Python (Flask), Git, Docker, SQLite

April 2023 - Present

- Creator & Lead Architect
 - Spearheaded Dictionarry, an open-source ecosystem simplifying media automation for Radarr/Sonarr users via data-driven documentation, custom configurations, and integrated tooling.
 - Profilarr: Architected and led development of Profilarr (Q), a full-stack (React, Flask) configuration management tool (100,000+ Docker pulls, 800+ GitHub stars). Engineered its core git-based synchronization and a novel compilation engine to translate standardized configurations into application-specific syntaxes, enabling robust versioning and user customization.
 - **Database:** Designed and implemented the Dictionarry Database (\mathbf{Q}) (20,000+ unique clones, 60+ GitHub stars), establishing a "single definition" standard for configurations. Developed data-driven systems like the Encode Efficiency Index (EEi) with k-means clustering and the Golden Popcorn Performance Index (GPPi) to objectively rank media. Its design has inspired numerous forks (70+) and fostered wider community sharing of novel configurations.
 - Web Platform: Developed the Dictionarry web platform (dictionarry.dev, •) (Next.js) as dynamic, selfupdating documentation for the database, using Incremental Static Regeneration (ISR). Features an interactive Profile Builder to simplify user selection of complex configurations.
 - Community Management: Cultivated and managed a vibrant Discord community of 800+ members. This involved coordinating moderators and contributors, handling pull requests, feature requests, and issues, providing technical support, and enhancing engagement with a custom Discord bot interfacing with the Dictionarry ecosystem.

PROJECTS

OMesh - Secure Decentralized Messaging Network 🗘

Python, React, Docker, WebSockets

Course Project - Secure Programming

- Implemented end-to-end encrypted messaging system using RSA and AES-GCM cryptography
- Containerized application using Docker Compose for multi-server deployment
- Built React frontend with Vite for real-time messaging interface
- Utilized WebSockets for server-to-server and client-server communication

ClubHub - Student Club Management Platform 🗘

Vue.js, Express, MySQL

Course Project - Web & Database Computing

May 2023

October 2024

- Built full-stack web application for university club management and event organization
- Implemented secure authentication system with multiple strategies (local and OAuth)
- Created responsive UI with Vue.js and Bootstrap
- Designed relational database schema for users, clubs, events, and memberships

Rogue - Turn-based Roguelike Game 🗘

C++, SFML

Course Project - Object-Oriented Programming

October 2022

- Developed procedural map generation system with dynamic enemy placement
- Implemented State Design Pattern for game object behavior management
- Created custom GUI components by extending SFML graphics library
- Built comprehensive test suite for sprite, text, and entity components

SKILLS

Languages: JavaScript, Python, C++, SQL, HTML/CSS

Frameworks & Libraries: React, Next.js, Node.js, Express, SFML, Tailwind

Tools & Technologies: Git, Docker, WebSockets, REST APIs, Linux, Bash, CI/CD,

Databases: MySQL, SQLite

Soft Skills: Community Management, Technical Documentation, Open Source Collaboration, Problem Solving,

Systems Thinking