

# Sewen Thy

BACKEND ENGINEER · CONCURRENT AND DISTRIBUTED SYSTEMS · PROGRAMMING LANGUAGES

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## WORK EXPERIENCE

### Ahrefs

Singapore

#### BACKEND INTERN

Oct. 2022 - Present

- Maintained and implemented new features for monorobt which allows for richer control over notifications from monorepos to slack.
- Rewritten internal orchestration tool from Javascript and bash into OCaml improving its concurrency guarantees, maintainability, and reliability.
- Heavily engaged with code reviews to produce clean code which significantly increase maintainability.

### Credit Suisse

Singapore

#### APAC TECHNOLOGY AND CHANGE SUMMER ANALYST (DEVELOPER EXPERIENCE TEAM)

May. 2022 - Jul. 2022

- Built long-running compliance checking services in Golang Gin that can recover easily to give peace of mind and help to prevent legal actions.
- Heavily practiced test-driven development (TDD) to significantly increase maintainability and development speed by incorporating at least 95% coverage for each Go package in the services using unit tests.
- Designed and maintained a full suite of integrated tests for a variety of scenarios ensuring all critical failures in our GitLab ecosystem are caught early and built many utilities for faster future tests development.

### ByteDance

Singapore

#### BACKEND ENGINEER INTERN, TECHNICAL ARCHITECTURE (MESSAGE QUEUE TEAM)

Jan. 2022 - May. 2022

- Enriched company wiki to ensure newcomers take less time getting up to speed on the system.
- Designed and built low-level long-running test services in Java that can recover easily so integration test cases are always up to ensure critical system bugs are caught in early stages and prevent catastrophic failures.

### BeLive Technology

Singapore

#### FULL-STACK DEVELOPER

Jan. 2021 - Dec. 2021

- Full-stack development for analytics dashboard of streaming solutions that provide concrete feedback and drive business strategies for their live-streaming solutions.
- Developed multi-threaded backends in different lightweight frameworks (Python Flask, C++ Crow) to provide highly available, and responsive service.
- Facilitated seamless DevOps using Docker with Nginx that improved team backend reliability and portability to AWS and Google Cloud.

### Yale-NUS College

Singapore

#### PEER TUTOR

Jan. 2021 - Dec. 2021

- Peer tutor for YSC1212 Introduction to Computer Science and YSC3236 Functional Programming and Proving. Helped each CS students with their personal approach which improve their understanding and write detailed reports about each session.

### NUS, Faculty of Engineering

Singapore

#### RESEARCH ASSISTANT

Aug. 2020 - Jan. 2021

- Designed and setup data pipeline for processing with HPC and communicate effective team guidelines to improve productivity.
- Work with geo-spatial data to create models that can accurately predict port boundaries to increase team's capabilities to study GHG emissions and further advice government policy-making.

### Edelman

Singapore

#### DXI (PREDICTIVE INTELLIGENCE) INTERN

Jun. 2020 - Jul. 2020

- Ran EDA to inform better feature selection and engineering using NLP techniques which increased the effectiveness of the baseline model allowing thought leadership opportunity that drives business strategies. Assisted in a variety of projects in different industries including financial, and pharmaceuticals.

### Yale-NUS College

Singapore

#### COMPUTATIONAL BIOLOGY RESEARCH ASSISTANT

Aug. 2019 - Dec. 2021

- Developed new functions to optimize linear programming processes and for better user experience through control over such processes. Migrated the software from Python 2.7 to Python 3.4 with detailed commits using GitHub.
- Maintained and managed intranet VMs for running models and helped with IDM for new students. Train new student developers in best practices and help build and project-manage for new feature developments for the scobra library.

## EDUCATION

### Yale-NUS College

Singapore

#### B.S. (HONS) IN MATHEMATICAL, COMPUTATIONAL, AND STATISTICAL SCIENCE FOCUSING ON COMPUTER SCIENCES

Aug. 2019 - May. 2023

- Advance coursework in concurrency and program language design and implementations with a capstone about writing the "Extract to function" refactoring for Rust.