

WORK EXPERIENCE

Research Assistant / Full Stack Developer

School of Computing, National University of Singapore

Aug 2018 – Nov 2019

- Part of Coursemology core team, in charge of maintaining Coursemology.org – an open source e-learning environment used by multiple education institutions in Singapore, with ~4000 weekly active users and ~100 active courses
- Technologies used: React, Redux, Ruby on Rails, PostgreSQL, Docker, Circle CI, Ansible, DigitalOcean
- Developed reporting feature to cache and display aggregate data of students' interaction with multimedia content
- Migrated production deployment to use Docker containers and docker-compose
- Monitor and scale cloud servers for periods of increased load, such as during practical exams
- Web app: <https://coursemology.org>

Project Lead

Computing for Voluntary Welfare Organisations (CVWO)

May – Aug 2019

- Led a team of 8 developers to complete two projects in 12 weeks. Directed the planning, system design, and execution of the projects.
- First project was the upgrading of Case Management System with 3 deployed instances serving 3 counselling centers in Singapore (Care Corner Counselling Centre, Care Corner Co-Parenting Centre, Care Corner Mental Wellness Centre)
- Second project was a progressive web app to jointly serve Beyond Social Services and GIC Sparks and Smiles program. Features include authentication, roles & permissions, user profile, events and attendance, survey with question bank, multiple question types, comments.
- Technologies used: React, Redux, Typescript, Ruby on Rails, PostgreSQL, Gitlab CI, Docker
- About the projects: <https://www.comp.nus.edu.sg/~vwo/projects/2019-sparks-cms.html>

Process Engineer

Micron Semiconductors

Jul 2016 – Apr 2018

- Managed high aspect ratio dry etch processes
- Executed process post-conversions qualification and new equipment qualification to ensure manufacturing capabilities meet manufacturing requirements
- Monitored SPC inline for early problem detection and root-cause analysis, optimized chart set-up

OTHER PROJECTS

Frontend Developer

Showface.io

Aug - Nov 2018

- An intuitive, mobile-friendly web application for groups to find the best time to meet
- Technologies used: React, Redux, Firebase, GraphQL, Apollo Client, Prisma
- Contribution: Implemented social login, email-password authentication, read-only and invite-only meetings, frontend flow and dashboard for authenticated users
- Application URL: <https://showface.io/>
- Project frontend repository: <https://github.com/WotFace/ShowFace>

EDUCATION

B.Eng (Hons) Chemical Engineering

National University of Singapore

Aug 2012 – May 2016

- Honors: CAP 4.4/5.0
- Awards: NUS ASEAN Scholarship (2012 – 2016)
- Final Year Project: Minimizing energy for managing boil-off from an LNG storage tank (optimization model on Matlab)

LANGUAGES

Fluent English and Vietnamese (both spoken and written), French A2, German A1