

PROFILE

Minseo is a self-taught Programmer with experience in Front-End Development through internships and personal projects. He is also pursuing a degree in Chemical and Biomolecular Engineering, under the CN Yang Scholars Programme. He actively seeks new experiences and is not afraid to step out of his comfort zone, as he is able to juggle his current degree of study while learning about software development on the side. He was also given the opportunity to lead a faculty club as the President, which houses more than 1000 undergraduates.

EDUCATION

B. Eng. (Chemical and Biomolecular Engineering)

AUG 2020 - PRESENT

Nanyang Technological University, Singapore

- Expected Highest Honours (CGPA: 4.68) | AY20/21 Dean's List | CN Yang Scholars Programme

INTERNSHIP

Software Development Intern

MAY 2022 - PRESENT

El Pando Pte Ltd, Singapore

- Tasked with the Front-End design of the new company website.
- [HTML/CSS/JS](#) | [Bootstrap 5](#) | [jQuery](#) | [ASP.NET](#) | [C#](#)

Undergraduate Student Research Intern

JAN 2022 - PRESENT

Digital Signal Processing Lab, School of Electrical and Electronic Engineering (EEE)

- AI For Soundscapes – Currently developing a probabilistic neural network, incorporating a bivariate normal distribution loss function to predict the associated perceptual of soundscapes
- [Python](#) | [Tensorflow](#)

CO-CURRICULAR ACTIVITIES

President – 17th Management Committee

SEPT 2021 - PRESENT

Students' Chemical and Biomedical Engineering Club (SCBE Club)

- Improved the welfare of the faculty of more than 1000 undergraduates through the mentorship of 6 different directors in event planning – i.e. annual SCBE Chem-E-Car Competition, Festival Week.
- Ensured a smooth transition of the faculty's merger with the Division of Chemistry through the revision of the club structure and new initiatives such as the clan system.

Business Director – 16th Management Committee

SEPT 2020 - AUG 2021

Students' Chemical and Biomedical Engineering Club (SCBE Club)

- Generated S\$10,000 revenue for the club through school merchandise sales.
- Coordinated with different companies for partnerships for the biannual Exam Welfare Initiatives, which has garnered many positive reviews.

Welfare Services Club – Internal Relations

SEPT 2020 - AUG 2021

Regular Volunteer

- Planned booth activities for families during Community Service Day at Boon Lay Community Centre.
- Volunteered for the collection of recyclables around Kreta Ayer neighbourhood.

CASE COMPETITIONS

NUS Fintech Month 2022 Blockchain Hackathon

JAN 2022

Problem Statement: "NFTs: Mint, Market or Monetize"

- Proposed the creation of a decentralized NFT marketplace that provides the gateway to create universal NFTs that can exist across multiple-chains.
- Presented our prototype in semi-finals for being the top 29 teams out of 100 teams

ACADEMIC PROJECTS

Classifications of Soundscapes with Deep Learning Algorithm

AUG 2021 – NOV 2021

Digital Signal Processing Lab, School of Electrical and Electronic Engineering (EEE)

- Implemented convolutional neural network (CNN) architecture as a predictive model for soundscape affective responses. Mel spectrograms and mel-frequency cepstral coefficients (MFCCs) were analysed as optimised inputs for the deep learning model.
- Continued the research attachment as an undergraduate intern.

Video Summarisation in Surveillance and Security Systems

JAN 2021 – APR 2021

SCALE@NTU, School of Computer Science and Engineering (SCSE)

- Experimented with existing convolutional neural networks on human activity recognition (HAR) with Tensorflow/Keras.

Emissions from Rare-Earth (RE) Ions by the Energy Transfer from ZnO Nanocrystals Embedded in SiO₂ Film

APR 2018 – APR 2019

School of Electrical and Electronic Engineering (EEE)

- Part of the Nanyang Research Programme for Junior College students.
- Proposed a new method of predicting the concentrations of Europium and Terbium ions needed for photoluminescence of white light with the use of MATLAB.
- Awarded 'Gold' among 150 different research projects presented.

SKILLS

HTML/CSS/JS
Bootstrap 5
jQuery
ASP.NET
C#

Python
Tensorflow/Keras
Pandas

LaTeX

LANGUAGE

English (Native)
Korean (Native)
Chinese (Elementary)