

# Leong Sheu Xiang

Visa Status: H1B1 eligible

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## EDUCATION

### National University of Singapore

Bachelor of Computing (Honours), Computer Science

Expected Graduation Date: May 2022

**Aug 2018 – Present**

CAP: 4.48 / 5

## TECHNICAL SKILLS

**Programming Languages:** Javascript, Typescript, Solidity, Dart, C/C++, Python, Elm, Java/Kotlin, Rust

**Frameworks:** React Native, React, NextJS, Flutter, Tensorflow, Pytorch, Hugging Face, PostgreSQL, pandas, IPFS

## WORK EXPERIENCE

### Research Intern, DSO National Laboratories

**Jan 2021 – Jun 2021**

- Researched coreference resolution on social media
- Explored different pretraining techniques including scraping and creating a self-annotated corpus of reddit posts with pandas to address the lack of training data in the domain
- Improved average F1 score of the SpanBERT model from 63.5 to 65.5 on Reddit genre of GUM corpus

## PROJECTS

### SwimmerPen, Final Year Project

**July 2021 – Present**

- Built on React Native and Typescript for fast prototyping and development
- Swim race analysis annotation app to streamline the full process of video recording, annotating biomechanical information and generating of report
- Trained an EfficientDet0 model on Tensorflow for edge device object detection on swimmers to estimate stroke counts

### NFT Project

**Nov 2021 – Feb 2022**

- Created a smart contract with Rust for randomised minting of NFTs on a L1 Blockchain(name redacted for anonymity) and built a marketplace frontend with NextJS to allow easy trading of the NFTs

### Static Program Analyser (SPA) for SIMPLE Language

**Aug 2021 – Nov 2021**

- Built with C++
- Program takes in a pseudo programming language, SIMPLE, analyses it and stores representations of it for fast static program analysis queries
- Designed an extendable processor that parses SIMPLE based on grammar rules and constructs an Abstract Syntax Tree (AST)
- Designed a query optimiser that reorders a query to reduce average computation time

### Plan<sup>2</sup>Travel

**Oct 2019 – Nov 2019**

- Built with Java
- An offline command-line interface (CLI) program to help travellers plan their trips
- Designed command autocompletion capabilities
- Designed UI for schedule visualization

### Spoiler Alert

**May 2019 – Aug 2019**

- Built with Javascript, HTML and CSS
- A simple browser plugin to censor content spoilers