# Sam Liu

### **Skills**

Technologies: TensorFlow, NumPy, Matplotlib, React, Django, Flask, NGINX, PostgreSQL

Languages: Python, JavaScript, SQL, C, C++, Java, Bash, Swift, HTML, CSS

# **Experience**

#### Software Developer, New York Theological Education Center

Jun 2021 - Present

- Developed a <u>website</u> and <u>app</u> used by **50+** NYTEC members to quickly navigate to commonly accessed links
- Designed an email and app notification system for instant access to the latest church news
- Technologies used: React, React Native, Firebase, Flask

#### iOS App Developer, St. Augustine Catholic High School

Feb 2020 - Jun 2021

- Contributed to an <u>app</u> used by **85%** of the student body for office and club announcements, daily cafeteria menus, song requests, etc.
- Redeveloped the <u>app</u> from scratch using SwiftUI to modernize the user interface
- **Technologies Used:** SwiftUI, Firebase, Git

**Deep Learning Specialization** 

**Dec 2021** 

# **Projects**

#### **Chess Al**

- An ML-powered chess bot rated at **1200+** that can be played against using a personally created user interface
- **Technologies Used:** TensorFlow, NumPy

#### **Song Sheet Creator**

- A website that allows guitarists to fetch song lyrics, annotate chords, add strumming patterns, auto-scroll, and view public song sheets
- **Technologies Used:** React, Redux, Django, PostgreSQL, NGINX

#### **Background Remover**

- An ML-powered background remover for portraits with 90% pixel accuracy and 65% IoU

#### **Photo Colourizer**

- CNN-based black and white landscape colourizer

### **Education**

- Computer Science at the University of Waterloo
- \$18k Rene Descartes National Scholarship (2021)