Sam Liu

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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 <u>Specialization</u>   Dec 2021

Projects

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

<u>Song Sheet Creator</u>
- 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

<u>Background Remover</u>
- An ML-powered background remover for portraits with **90%** pixel accuracy and **65% IoU**

<u>Photo Colourizer</u>
- CNN-based black and white landscape colourizer

Education

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

Skills

- **Technologies:** TensorFlow, NumPy, Matplotlib, React, Django, Flask, NGINX, PostgreSQL
- **Languages:** Python, JavaScript, SQL, C, C++, Java, Bash, Swift, HTML, CSS