ERIC XIAO

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EDUCATION

Sir John A. Macdonald Secondary School   **Expected Graduation: June 2021**

EXPERIENCE

Grand River Chinese School   **Waterloo, Ontario**
Online Olympic Math Teacher   *Mar 2020 - Jun 2020*
- Hosted the first ever online lessons for GRCS.
- Taught a class of 10 Grade 7 and 8 students various Olympiad Math topics (e.g. combinatorics, analytic geometry).
- Created weekly lesson plans and homework problems for these topics and taught topics online using Zoom.

PROJECTS

COV-AID (Devpost) - React, Solidity, Metamask, Google Cloud, MongoDB, Express.js
- Created a web application that uses blockchain to improve the process of obtaining financial aid during the COVID-19 crisis.
- Implemented the Google Cloud Vision API for financial eligibility by scanning a health card and created a complex Javascript algorithm to obtain only the necessary information (Name, Birthday, Card ID).

Fresh-Rotten-Classification (GitHub) - Python, PyTorch, Flask, Svelte
- Built a web app that runs a machine learning model to classify fresh and rotten fruit images.
- Created the frontend with Svelte, set up a Flask backend server, and trained a PyTorch CNN on fresh and rotten fruit images.

CogniTalk (Devpost) - Svelte, Python, Flask, Firebase
- Created a web platform that analyzes user audio responses to various interview questions and maps their performances on a table to view areas of improvement.
- Implemented a Svelte frontend and the Firebase Authentication and Firestore APIs, and helped link these to the Flask backend server that runs an audio analysis library.

TECHNICAL SKILLS

- **Programming Languages:** Python, Javascript, HTML, CSS, Java
- **Frameworks:** Processing, Svelte, React, jQuery, React Native, PyTorch, Flask, Node.js
- **Technologies:** Firebase, Google Cloud, Microsoft Azure

HONORS & AWARDS

- Won the Second Place Prize at MasseyHacks VI.
- Won WinHacks 2020's Most Innovative Hack Against COVID-19 Award ($1000 CAD prize).
- Made honour rolls (Group II) and earned Distinction Award (top 25%) for the 2020 CEMC Fermat Math Contest (score of 144/150).
- Made honour rolls for Southwestern Ontario in the 2019 Canadian Open Mathematics Challenge (score of 58/80).
- Won Fortmatic's 3rd place 250 CAD (190 DAI) API prize at ETHWaterloo 2019.
- Received second place at JAMHacks 3.
- Won third place in the ECOO regionals competition, earning a spot to finals.
- Earned Distinction Award (top 25%) for the 2019 CEMC Euclid Math Contest (score of 76/100).

EXTRACURRICULARS

Ontario eSports Federation - Frontend Developer
- Managed the OEF's main website's frontend technologies.
- Contributed a Markdown news editor for creating posts.

Grand River Chinese School - Olympic Math Teacher Assistant
- Taught a class of 10 Grade 7 and 8 students various Olympiad Math topics (e.g. polynomials, sets) on-site.
- Contributed 40 questions to and helped proctor the 2019 Nine Chapters On The Mathematical Art Contest.

Kumon North America - Educational Assistant
- Marked and corrected the Math and Reading worksheets of various students and answered student questions related to the worksheet problems.
- Recorded student data on an online spreadsheet and sorted out student files efficiently.
- Answered phone calls and responded to questions from adults and students at-centre.

Active Club Member in: Mathletes, CS Club, Intermediate Jazz, Senior Band, Science Club, Chess Club