Colin Ruan

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SKILLS

- **Languages**: Java, Typescript, JavaScript, HTML/CSS, Python, C, C++, Haskell, Bash, SQL
- **Tools**: Git, Docker, GCP, AutoML, Firebase, MySQL, Unix
- **Libraries/Frameworks**: React.js, Node.js, Pandas, NumPy, OpenCV, Tensorflow

EXPERIENCE

- **Voltera Inc.** — Kitchener, ON
  Junior Developer — *May 2022 - Aug 2022*
  - Created a machine learning model to detect the quality of a 3D print using **AutoML**
  - Created a Dockerfile and Docker Compose file that builds a Docker container which calls the ML model
  - Developed the user facing app using **Typescript** and **React.js**
  - Designed a cloud image gallery using **Google Cloud Platform** and **Firebase Cloud Storage**
  - Worked with Raspberry Pi 3 and Jetson Nano development boards

- **Coding Club** — Aurora, ON
  President — *Sep 2018 - June 2021*
  - Introduced students to the fundamentals of **Java** and object oriented programming
  - Prepared students for the Canadian Computing Competition
  - Taught lessons using tutorials and practice problems

PROJECTS

- **Chess** — github.com/cruan9/Chess
  C++ — *Nov 2022*
  - Created a functional chess game with key concepts of object oriented programming in **C++**
  - Worked with group members to collaborate on various aspects on the chess game
  - Implemented various difficulties of computer level as well as a two player mode
  - Created an intuitive graphical display of the chess game using **XWindow**

- **TFT Statistics** — github.com/cruan9/TFTStats
  Python — *Feb 2022 - Present*
  - Provided the user with relevant statistics for the game Teamfight Tactics in **Python**
  - Used RESTful API to import JSON data from a server
  - Parsed and analyzed the JSON data to output winrate, common units, etc.

- **Tic-Tac-Toe** — github.com/cruan9/TicTacToe
  React.js, HTML, CSS, Javascript — *March 2022*
  - Designed a Tic-tac-toe game using **React.js**
  - Interactive interface that changes based on the board state
  - Allowed the user to return to previous board states and undo moves

- **Ignition Hacks** — github.com/cruan9/IgnitionHacks2020
  Python — *Aug 2020*
  - Created an AI that detects the sentiment of a message using **Python**
  - Collaborated with group members to improve the efficacy of the AI

- **Personal Website** — cruan9.github.io
  HTML, CSS — *Dec 2021 - Present*
  - Designed a personal website using **HTML** and constructed an interface for all users using **CSS**
  - Deployed on GitHub pages for users to visit on any device
  - Use of embedded links to guide the user towards information about myself

HONORS AND AWARDS

- Recipient of University of Waterloo President's Scholarship ($2000)   –   2021
- Distinction Award in the Senior Canadian Computing Competition (CCC)   –   2020-2021
- Distinction Award in the Euclid Math Competition (Placed top 1% of participants)   –   2021
- Distinction Award in the CSMC Math Competition (Placed top 1% of participants)   –   2020-2021
- Qualifier of American Invitational Mathematics Examination (AIME) (Placed top 5% of participants)   –   2021

EDUCATION

- **University of Waterloo** — Waterloo, ON
  Bachelor of Computer Science — *Sep 2021 - Apr 2026*