# LARRIS XIE

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#### SKILLS

Languages: C++, C#, Java, Python, JavaScript, TypeScript, SQL, Dart, R

Frameworks: React, NextJS, ExpressJS, NodeJS, Flutter

Tools/Databases: Git, Vercel, Figma, Postman, Jupyter, GCP, Unity, MongoDB, Firebase, SQLite

EXPERIENCE

Lumiere EducationRemoteStudent ResearcherAugust 2022 - Feb 2023

• Analyzed a financial transactions dataset using Python and trained a machine learning model to classify fraudulent financial organizations with an accuracy of over 99% and a 0.001% false positive rate.

• Published a research paper in the **Journal of High School Science** 🗹 under the mentorship of professor Maria Konte, a computer science PhD from Georgia Tech.

Inspirit AI Remote
Student Fellow Oct 2022 - Jan 2023

- Developed **computer vision models for self-driving cars**, with multiple approaches including neural networks, CNNs, transfer models like VGG16, and YOLO.
- Conducted a **comparative analysis** 🗹 of different model architectures, evaluating trade-offs between speed and accuracy in the context of autonomous driving.

## J.P. Morgan Virtual Program

Remote

Virtual Software Engineer

September 2023 - November 2023

- Fulfilled engineering tickets to create a quantitative analytics platform that helps traders better identify under/over-valued stocks.
- Launched a data dashboard for the visualization of JPMorgan Chase's Perspective library, saving trader productivity hours.

#### Projects

Frood React, Redux, ExpressJS, NodeJS, MongoDB

- Developed a **MERN stack web app** that allows people to find recipes based on the ingredients they currently have in their kitchen.
- Implemented a **REST API with NodeJS** to handle user authentication with JWT, user input of ingredients, and querying through MongoDB to filter the recipes.

### NutriScan Z Swift, Python

- Developed an iOS app that tracks daily nutritional intake through computer vision.
- Created a Python script that classifies the food in a photo using **image recognition** hosted by Google Cloud and displays the total nutritional facts to the user.

### Twist Twist Revolution ✓ Python, OpenCV

- Built a computer vision based rhythm game using Pygame and OpenCV.
- Produced a real-time **hand gesture tracker** using OpenCV and MediaPipe that acts as the inputs for the game.

#### EDUCATION

# University of Waterloo Bachelor's of Computer Science

Waterloo ON, CA Sept 2024 - May 2029

Nortel Institute Scholarship Recipient (\$1750)