

# Christian Florea

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## EDUCATION

### University of Waterloo

Sep 2020 – Aug 2026

*Bachelor of Science in Mechatronics Engineering, Software Engineering Minor – GPA: 3.88/4.00*

## EXPERIENCE

### Uber

Sep 2025 – Nov 2025

*Software Engineer Intern*

*Sunnyvale, CA*

- Working across **iOS** and **Go** services for Rider Experience, building a new feature used globally by riders.
- Collaborating on requirements with product and design teams to ensure integration across mobile and backend.

### Verkada

May 2025 – Aug 2025

*Software Engineer Intern*

*San Mateo, CA*

- Designed a file export pipeline (**Kafka**) to offload heavy compute from endpoint, improving success rate by **5.6%**.
- Introduced active job tracking in **Redis**, limiting concurrency and ensuring fair resource usage across users.
- Scaled consumers on **Kubernetes**, tuning CPU and memory for efficient resource usage and reliable performance.
- Offloaded 100% of user read traffic from Postgres to **Elasticsearch**, reducing p50 endpoint latency by 46%.

### Magi Inc

Jan 2025 – Apr 2025

*Software Engineer Intern*

*San Francisco, CA*

- Built a vector-based recommendation engine from scratch to personalize fashion suggestions for users.
- Designed an ingestion queue to process image description, embedding, and vector storage for **900k+** images.
- Implemented a **RAG-based re-ranking** algorithm to improve relevance, increasing outbound clicks by **19%**.

### Verkada

May 2024 – Aug 2024

*Software Engineer Intern*

*San Mateo, CA*

- Developed a new intercom dashboard page to display and sort more than **100k** weekly call and video events.
- Created new **React** components that utilize **Redux** for state management; tested using RTL and Cypress.
- Created **custom hooks** to localize intercom events with user and call metadata, improving dashboard readability.

### Relay Financial

Sep 2023 – Dec 2023

*Full Stack Engineer Intern*

*Toronto, ON*

- Built a receipt management system using **Express.js** to parse and upload data from 1000+ daily emailed receipts.
- Offloaded intensive OCR and data parsing tasks to **AWS Lambda**, and integrated **SES** to notify users of errors.
- Implemented Veryfi's API to improve OCR, resulting in receipt to transaction **matching accuracy of 98%**.

## PROJECTS

### OpenCV Ball Balancing Platform | *Python, OpenCV, Firmware (C++)*

Oct 2024 – Dec 2024

- Used OpenCV for real-time object tracking, enabling accurate platform control on embedded hardware.
- Optimized thread synchronization to avoid race conditions and ensure consistent data flow between processes.

### Swim Meet Results Web Scraper | *Python, OOP, Web Scraping*

Mar 2023

- Created a web scraper to analyze swim meet results (500+ athletes), visualizing the data using Matplotlib.
- Implemented a local caching system to persist scraped swim data across sessions, cutting runtime by 60%.

## EXTRACURRICULARS

### Varsity and Club Swimming

2011 – Present

- Qualified for the 2020 Canadian Olympic Trials through commitment, strong work ethic, and training 15+ hr/wk.
- Exhibited leadership skills and ability to work with others as assistant team captain of the varsity team.

## TECHNICAL SKILLS

**Languages:** Python, TypeScript, JavaScript, Go, C++, C, SQL

**Tools:** Postgres, AWS, GCP, WebSocket, Docker, React, Redux, Redis, Kafka, Kubernetes, OpenCV