

# Anirudh Iyer

SOFTWARE ENGINEER

 +1 (905) 616-1772 |  a24iyer@uwaterloo.ca |  anirudhi.github.io |  Waterloo, Ontario

## Education

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### University of Waterloo BSc IN COMPUTER SCIENCE

Expected : Apr 2021

**Relevant Courses** Data Structures, Algorithms, Operating Systems, Object Oriented Programming, Databases, Functional Programming, Compilers, Computer Architecture, Program Verification, Graph Theory, Security, Quantum Computing, HCI, Networks

## Experience

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### Paravision

SOFTWARE ENGINEERING INTERN

San Francisco, CA (Remote)

May 2020 - Aug 2020

- Improved inference time by 20% in a high performance **face recognition SDK** by converting **TensorRT** engines to **ONNX**.
- Developed a system to **compile and distribute** releases at scale for Paravision's primary **C++ SDK** with **CircleCI**.
- Reduced **GPU utilization** by 15% in real time streaming app by detecting unused frames and implementing **NMS**.
- Created production ready, multi stage Docker images to use for **Computer Vision** deployment at scale.

### SelfMade

SOFTWARE ENGINEERING INTERN

New York, NY

May 2019 - Aug 2019

- Created a referral system and targeted onboarding to increase **user aquisition** for SelfMade Collabs by 400%.
- Built **REST APIs** in **Meteor/Node.js** to handle multi-user chat, Instagram giveaways and several other collaboration tools.
- Developed components in **React/Redux** for user profile creation and brand filtering.
- Optimized **API worker instances** on EC2 to handle over 200% more concurrent jobs from >50 **SQS** queues.

### Shopify

SOFTWARE ENGINEERING INTERN

Ottawa, ON

Sep 2018 - Dec 2018

- Migrated the Shopify Logistics admin platform from **Ruby on Rails** to a **GraphQL, React.js/TypeScript** stack.
- Implemented a new refunds flow in React that could handle **orders** with >1000 line items and multiple shipping locations.
- Optimized refund query algorithm to **filter out stale data**, reducing data sent to the web client by 30%.
- Architected **GraphQL APIs** and client interfaces to allow the editing of orders, the most requested feature in Shopify.
- Ensured client security at scale through end-to-end testing with **Enzyme/Jest**.

### Mani Wonders

WEB DEVELOPMENT INTERN

Toronto, ON

Jan 2018 - Apr 2018

- Refactored their primary ecommerce portal resulting in **12x faster load times** and an **80% reduction** in redundant data being loaded.
- Introduced version control management and **drastically sped up developer productivity** by setting up a CI pipeline.

### Inksmith

3D DESIGN AND FIRMWARE DEVELOPER

Kitchener, ON

May 2017 - Aug 2017

- Developed an extensible Arduino based robotics framework consisting of low cost, 3D printed parts for educational use.
- Designed a variety of CAD models for various client needs, with optimisations for additive manufacturing.

## Skills

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**Languages** C++, Python, Java, Javascript ES6, Golang, PHP, Lisp, Bash, C

**Technologies** React.js, Node.js, Docker, MongoDB, Postgres, CircleCI, TensorRT, Redis, gRPC, Protobuf, Meteor, AWS, Enzyme

## Projects

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### You Can Get In

A web application that provides prospective university students with crowdsourced acceptance averages and other metrics to better understand their fit.

React.js Golang, MongoDB

[github.com/anirudhi/YouCanGetIn](http://github.com/anirudhi/YouCanGetIn)

### Fairy 15

A 3D dogfighter with stylized graphics and concurrent 15 client multiplayer.

Unity 3d, C#

[github.com/anirudhi/Fairy15](http://github.com/anirudhi/Fairy15)