

Jonathan Shanmuganantham


SKILLS ☎ +1 437 662 5405 | @ jshan9078@gmail.com |  LinkedIn |  GitHub |  jonathanshan.tech |

Programming: Python, C++, Javascript, Typescript, HTML CSS, Java, Object-Oriented Programming

Technologies: React, MongoDB, Express, Node, Next, FastAPI, Manifest V3, Bootstrap, Tailwind

Dev Tools: Git/Github, Google Cloud Platform, Docker, Vite, Figma, Trello

WORK EXPERIENCE

Codin | 

San Francisco, California, United States (Remote)

Full Stack Developer

Sep 2023 – Present, Internship

- Building a website backed by **UC Berkeley** and the **League of Innovators** for students to share their projects, develop portfolios, and find internship opportunities
- Internship database has been used by **1000+** students
- Created **14 React** components and styled them using **Tailwind**
- **Dockerized** and integrated **Node RESTful API** with **30+** endpoints to interact with **MongoDB** database

Toronto District School Board

Scarborough, Ontario

Front End Developer

Mar 2023 – Present, Freelance

- Worked under Albert Campbell C.I.'s **Vice Principal and Tech Lead** with a team of 7 students to redevelop the school's website using **HTML CSS, jQuery**, and **Bootstrap** with a focus on **UI/UX**
- Projected to be used by **~1200** students to get notified about school events and access essential information

Robotics Team @ Albert Campbell C.I.

Scarborough, Ontario

Team Captain and Lead Programmer

Sep 2019 – Jun 2023, Extra-curricular

- Designed an **autonomous** multi-terrain Arduino robot using **C++** which won **1st out of 20** teams at **UofT's** Provincial Robotics for Space Exploration Competition and an **autonomous** wrestling robot using **ultrasonic technology** which won **4th out of 65** teams at **Ontario Tech's** Provincial SumoBot Competition

PROJECTS

Grocery Run |  |  **Hack the Valley Winner** React, Python, FastAPI, Google Maps API, OpenAI

- Website for users to save money and time on groceries by finding sales and recipes, and planning shopping trips
- Engineered **RESTful endpoints** to scrape flyer sites and to calculate shortest trips using **graph theory**
- Leveraged **GCP** to render driving path visualizations and **OpenAI GPT** to produce recipes from shopping lists
- Worked with **Paybilt's CTO** to integrate secure **Interac E-transfer** for grocery checkout

friended. |  | 

Next, Typescript, Tailwind, Supabase, PostgreSQL, OpenAI

- Website that classifies users by information on their LinkedIn and Devpost in order to recommend similar users
- Employed **Next** for server-side rendering and used **Supabase** for Google authentication
- Leveraged **OpenAI embeddings** to perform **vector cosine similarity search** using **PostgreSQL**

Clip-kun | 

React, Express, Node, MongoDB, Multer, Cloudinary SDK

- Website that allows users to makes clips from shows in the cloud to share with other users
- Designed **REST API** endpoints using **Express** and **Mongoose** to interface with the **MongoDB** database
- Configured **CRUD** operations with the **Cloudinary SDK** to allow users to manage their **digital media**

Competitive Programming

- Solved **400+** data structures and algorithms problems on Leetcode, HackerRank, and other online judges
- **Ran a club** in highschool to give lectures on computing concepts and to prepare students for contests

AWARDS & ACHIEVEMENTS

Governor General's Academic Medal, Government of Canada

Awarded for having the highest academic standing at the secondary school level (**99.2%**)

2x Distinction At Canadian Computing Competition (Senior Division)

EDUCATION

University of Waterloo

Waterloo, Ontario

Bachelor of Computer Science

Societies: Event Co-ordinator @ Computer Science Club, Data Science Club