

DARSH SHAH

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SKILLS

Languages: Python, C, C++, JavaScript/TypeScript, HTML/CSS, Bash

Frameworks/Tools: Git, OpenCV, Flask, React, NLTK, TensorFlow, NumPy, scikit-learn, Bootstrap, Bulma, VHDL, Figma, Jupyter Notebook

EXPERIENCE

Software Developer

June 2022 – Aug. 2022

Nu Vision Metals [↗](#)

Scarborough, Ontario

- Architected a CI/CD pipeline via GitHub Pages for streamlined version control, reducing long-term **deployment time to < 50%**
- Performed extensive UI/UX research using company metrics to revamp the company site, increasing **website traffic by 27%**
- Produced cross-platform wireframes with Figma and CSS, reducing **bounce rate by 24%** through A/B testing protocols

PROJECTS

Vibe [↗](#) | Python, React, NLTK, Whisper API, Spotify Web API

Dec. 2023 - Present

- Innovated a novel mood detection platform, utilizing speech-to-text and **NLP** to identify user emotions from audio clips
- Extracted transcriptions with **OpenAI's Whisper API** and evaluated mood with a **NLTK** sentiment analysis neural network
- Created a **React web app** recommending personalized music from over **100M songs** based on user mood via **Spotify Web API**

SaFire [↗](#) | Python, Node.js, React, Vite, Flask, Socket.IO, WebRTC

Oct. 2023 - Dec. 2023

- Collaborated to tackle residential fire detection using a Raspberry Pi and supervised learning model with **80% accuracy**
- Leveraged **React** and **Vite** to build the frontend with **WebRTC** integration, providing users with a real-time camera feed
- Developed **Flask** server with **Socket.IO** to process signals from the YOLOv8 model for rapid and seamless interaction

Personal Website [↗](#) | JavaScript, HTML/CSS, SCSS, Bootstrap, Bulma, GitHub

Aug. 2023

- Constructed a mobile-first portfolio site with **Bootstrap** and **Bulma** for a seamless experience across diverse screen sizes
- Accelerated page load times by manipulating the DOM using **vanilla JavaScript**, creating a more dynamic and interactive site

LEADERSHIP

STEM Instructor

Sep. 2022 – Sep. 2023

City of Brampton

Brampton, Ontario

- Designed an easy-to-follow curriculum for an Introduction to Python course and proctored assessments for **50+ students**
- Developed **10+ theory-based projects** on OOP and Big O for hands-on learning, achieving a **96% participant satisfaction**

President

June 2022 – June 2023

SciTech Activity Committee

Brampton, Ontario

- Led **25+ members** in a cross-functional team to organize STEM events including the Peel Board's largest hackathon, WolfHacks
- Crafted and presented compelling sponsorship proposals, securing over **\$50,000** in funding from Rogers and the CSA
- Coordinated prizes, merchandise, and venues for **800+ participants**, causing a **12% YoY growth** in the SciTech community

EDUCATION

University of Waterloo

Sep. 2023 – Apr. 2028

Honours, Bachelor of Software Engineering | **3.93 GPA**

Waterloo, Ontario

- Guo Family Engineering Scholarship and President's Scholarship of Distinction
- Relevant Coursework: Intro to Data Structures and Algorithms, Intro to Data Abstraction and OOP, Methods of Software Engineering, Linear Algebra, Linear/Digital Circuits

AWARDS

Recipient | Governor General's Academic Medal: *Government of Canada*

June 2023

Recipient | Science and Technology Award: *SciTech North Regional Program*

June 2023

School Champion | Euclid Math Contest: *University of Waterloo*

Apr. 2023

Semi-Finalist | Loran Scholarship: *Loran Scholars Foundation*

Oct. 2022