Searan Kuganesan

searan.kuganesan4@gmail.com | (647) 854-4416 | 88 Highhill Dr, Scarborough ON | github.com/Skugane6
3rd Year Software Engineering Student

EDUCATION

B.E.Sc. Software Engineering   *September 2021-Present*
Western University, London ON

Ontario Secondary School Diploma   *June 2021*
Sir John A Macdonald CI, Scarborough ON

ENGINEERING EXPERIENCE / PROJECTS

Pet Recommendation App   *Dec 2022 to Jan 2023*
Side Project

- A pet recommendation app built with React.js for the front end and Express.js for the back end seamlessly integrates with the Petfinder API, enabling users to browse and discover pets available for adoption. Various details of pets are listed along with images.
- Employing a sophisticated algorithm, the app tailors pet recommendations by dynamically analyzing user responses to a set of questions, ensuring personalized and well-matched adoption suggestions. The user can provide feedback on the application as well.

Eye Tracking Mouse   *Dec 2022 to Jan 2022*
Side Project

- Tracks the location of the user's eyes to move the cursor accordingly.
- Created using Python, utilizes the libraries MediaPipe, OpenCV, and PyAutoGUI. The MediaPipe library is used for facial landmark detection, while OpenCV is used for image processing and tracking the user's eyes. PyAutoGUI tracks the movement of the cursor.

iFinance Application   *Jan 2023 to April 2023*
Software Design Project, University of Western Ontario

- Designed and partially developed a versatile Personal Finance Management System with user authentication and user creation. Built Using Java, SQL, and JavaFX.
- Implemented the fundamental principles of double-entry bookkeeping, allowing users to manage assets, liabilities, income, expenses, and facilitating accurate tracking of financial transactions within the system.

RELEVANT WORK EXPERIENCE

Computer Science Tutor   *July 2021 – August 2023*
Scarborough ON

- Instructed middle and high school students in Java and Python programming languages, facilitating a comprehensive understanding of computer science concepts and techniques.
- Tailored tutoring sessions to individual student needs, fostering a conducive learning environment and promoting academic growth in computer science.

TECHNICAL SKILLS

Programming Languages	Java, Python, JavaScript, C, C#, CSS3, HTML5, MATLAB, SQL
Libraries and Frameworks	React, Angular, jQuery, Flask, JavaFX, OpenCV, Express.js
Other Skills	MongoDB, NoSQL, Node.js, MS Excel, Arduino, Altium, AWS

EXTRACURRICULAR ACTIVITIES

WE Bots — Western Engineering Robotics Club Software Team   *September 2022 to Present*
Gained valuable engineering experience to design, program, and construct a humanoid, autonomous robot. Developed experience with several machine learning libraries including TensorFlow and PyTorch

Western Formula Racing — Electrical Team   *September 2021 to Present*
Specialized in the design, integration, and deployment of electrical systems for Formula One racing cars. Worked with a group of engineering students to ensure the car is running optimally and meets all safety requirements.