

KARAN SAHNI

647-631-4512 ◊ karan-1999@hotmail.com

Github.com/sahnik1

EXPERIENCE

McMaster Engineers Without Borders'

— Global Engineering Conference

October 2017 - March 2018

Executive

- Created and maintained the website for the conference.
- Other roles included making promotional material such as banners, posters and logos.

PROJECTS

Particle Simulation Game — Multi Platform Application

October 2019

C++, OpenGL

- 5000+ particles generated with random valued attributes such as colour, speed, size and position
- Parametric equations, vectors and other mathematical methods used to model particle movements.

CarSearch — Full Stack Application

February - May 2019

Java, React, MySQL, Python, Scrum

- Google Vision Api used to identify cars from photographs. Large database provides Key Car Details for that vehicle such as Recall Info, Safety Rating and Fuel Economy.
- Mobile app Front-end with React, Back-end with in Java, data organizing in MySQL, and Web Api Scrapping with Python Scripts.

Math Library — Mathematical Equations Evaluator

May 2018

Haskell

- Implemented Math Library complete with Parsers, Partial Differentiation, Evaluation of Functions, Simplification of Functions and Calculation of Gradient Vectors

Web Game/Website — Web Application with Resume Website

April 2018

JavaScript, Html, Elm

- Developed Where's Waldo Web Game using the MVC Design Model.
- Created Personal Resume Website to host the Web Game, Links to Projects and Documentation

TECHNICAL STRENGTHS

Programming Languages

Java, C++/C, JavaScript, MySQL, Python, Swift, Ruby, Elm, Haskell, Assembly (x86, MIPS)

Tools & Frameworks

ReactJS, Git, SVN, OpenGL, Unix Shell Scripting, LaTeX, Doxygen, Microsoft Office

EDUCATION

Honours Computer Science — Bachelor of Applied Science

September 2018 - May 2021

McMaster University, Hamilton, Ontario

Relevant Coursework:

Data Structures and Algorithms, Object Oriented Design (Python, C++, Java, UML Diagrams), Software Life Cycle (Scrum) and Requirements Documentation, Database Schema Design