

NICO STEPAN

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EDUCATION

McMaster University

B.A.Sc. (Honours), Computer Science

Hamilton, ON

Sep 2018 – Apr 2020

B.Sc. (Honours), Physics

Sep 2014 – Apr 2018

SKILLS

Languages C/C++ (*3 years*), Python (*3 years*), JavaScript, PHP, L^AT_EX (*all ~1 year*)

Software MATLAB, Maple, Bootstrap, Firebase, OpenGL/GLUT

WORK EXPERIENCE

Facebook

Menlo Park, CA

Software Engineer Intern

Jun 2019 – Aug 2019

- Developed an effective, personalized, self-serve auto-diagnosis internal tool for detecting Facebook revenue issues by working with a small team within Ads Infrastructure
- Reduced query latency by ~90% through implementing multiple backend optimizations such as caching repeated queries, parallelization, and system/sub-system specific filtering using PHP
- Improved user-friendliness and increased the number of users by ~25% through implementing features for users to view their query history, save and customize queries, and provide additional insights about system specific issues using PHP and React

Apple

Toronto, ON

Genius Bar Technician

Jul 2017 – Oct 2018

- Diagnosed technical needs and efficiently communicated to deliver a seamless customer experience
- Adapted during rotation of various technical specialties and skill sets while thriving on change as Apple products evolve
- Provided training, mentorship, and feedback for newly hired Apple Technicians

PROJECTS

Jabbic

A mobile app built with React Native that provides a user with targeted advertising based on their physical facial features and accessories. Using a dataset with over 200,000 images, Jabbic utilizes a custom API built with Google's AutoML to display an advertisement pertaining to the user.

What Am I?

A mobile app that allows a user to reverse image search by taking or uploading a picture. Built with React Native, this app constructs a Google Cloud Vision API request which then returns a best guess, and three other results generated by the web detection feature for highest accuracy.

3D Modelling System

An OpenGL and C++ project that allows a user to create, save, or load a scene of 3D interactive objects. Using ray-casting, individual objects can be selected and manipulated anywhere on the display. The system also supports object transformations, texture mapping, lighting settings, and other features.

Terrain Generator

An OpenGL and C++ project that generates a random terrain using either the circles algorithm or the fault algorithm. The system supports a variety of terrain sizes, colours, lighting settings, wireframe modes, and a hypsometric tint option to indicate elevation.

Gasham

This project displays all sorted gas station prices based on user desired address, city, area, and preferred travel distance to gas station. Built with Python, the Geocoder library is used to transform addresses into geographic coordinates which allows distance to be calculated. The Urllib and re libraries are then used to web-scrape real-time gas station data and append to a JSON file.

EXTRACURRICULARS

Hackathons – *HackPrinceton, QHacks, DeltaHacks*

McMaster Students Off Campus Society, *Welcome Week Representative*

McMaster Undergraduate Physics Society, *Fourth Year Representative*