

Education

University of Toronto, B.Sc. Computer Science Specialist – 3.6 / 4.0 Major G.P.A

September 2017 – April 2021

Skills and Languages

<i>Proficient:</i>	• Java	• Python	• JavaScript	• React, Redux	• HTML/CSS	• Git
<i>Familiar:</i>	• NodeJS	• Express	• MongoDB	• WebSocket	• Socket.io	• Flask

Experience

Knowtworthy – Co-founder & Full Stack Developer

November 2017 – Present

- Engineered the full-stack of a web application from scratch, with laying out new ideas, building web-pages and servers, testing features with real users, and iterating to optimize UI and functionality
- Designed UX optimized webpages in React and Redux that are feature-rich, have many communicating components, and provide powerful functionality
- Wrote back-end server endpoints that interact with a MongoDB database to efficiently process data in the application
- Member of a UofT start-up accelerator (The Entrepreneurship Hatchery); placed against the top 14 teams in the annual “Demo Day” competition and **won 2nd place, winning \$10,000 in company funding**

University of Toronto – Web Developer

January 2018 – April 2018

- Refactored JavaScript code in a project to utilize the ReactJS library for a more organized implementation
- Attended weekly code review sessions with the team to present work done and offer advice to other programmers

Highlighted Projects (See <http://sidgupta.tech> for details)

Orion Data, JavaScript using React, Redux, WebSocket

September 2018

- Web application that analyzes the facial emotion of a user watching a video, and then recommends new videos for the viewer, as well as provides analytics to the content creator to show how his/her audience feels when watching
- Set up real-time webcam streaming using WebSockets, stored data in a real-time database, and arranged necessary API calls

Sentiment, JavaScript using React, Redux, Node – Hack the 6ix 2018

August 2018

- Collaborated to develop an application that transcribes a conversation in real time, and also visualizes the sentiment of each discussion member with graphs (populating overall irritation / dispute levels)
- Set up a pipeline that streams audio in real-time to a back-end, and also designed webpages that visualize processed data
- Built at Toronto's largest summer hackathon, and **won 1st place** after pitching to over 400 people and competing against over 65 submitted projects

AutoNote, Python using Microsoft Computer Vision A.P.I – Electric City Hacks 2017

November 2017

- Worked with two teammates to develop a machine learning program that generates notes from a whiteboard video
- Wrote algorithms that would parse and store the frames of a video, store results given from the A.P.I, and determine the points in a video when the whiteboard was most full
- Winner of **Best Use of Project Management award** and **Wolfram One award**; placed in top 15 hacks

Moon Grounder, Processing / Java

February 2017

- Developed a ‘lunar lander’ type game where the user tries to land a rocket ship on randomly generated levels
- Applied mathematics to construct each unique level, with a precise use of geometry and trigonometric calculations