

DANIEL RAYMOND

EXPERIENCE

SpaceX

2021 May-Aug

Starship Sensor Development Intern

- Helped create the world's best navigations solution for Starship
- Developed FPGA DSP logic and firmware to efficiently control the device
- Devised real time system architecture to integrate a custom PCB

AMD

2020 Sept-Dec

Firmware + Full Stack Intern

- Designed and implemented website to cultivate team workflow
- Made website to improve info visualization and team analytics
- Implemented on-chip communication system for the new AMD chips

PROJECTS

Word2Vec Passion Finder App

2020 Sept-Feb

- Built a flutter app to help people find passions using Wikipedia dataset
- Used unconventional technique with word2vec to map topics
- Suggests topics based off user position in topic map

LinkedIn Career Mapping

2020 Aug-Sept

- Utilized LinkedIn data to embedded 600 careers into a 50-D space
- Created career trees to highlight various routes to obtaining a job
- Categorized career types by using agglomerative clustering

Vibeify: Artificially Intelligent DJ

2020 February

- Designed website to track 'vibe' of the room & play corresponding music
- Tracked the motion of bodies using TensorFlow JS & PoseNet
- Implemented sorting algorithm to run & play songs using Spotify API

Custom Four-Bit Computer

2019 Jan-Aug

- Designed a breadboard prototype from a basic block diagram
- Hand-routed a PCB with 200+ connections & 40+ chips
- Polished final product with a 3D printed case & an acrylic cover
- Devised custom machine code language with a unique programmer

SKILLS

High Level

Python, TensorFlow, NumPy, Pandas, Jupyter Notebooks, SQL, Bash, Git

Low Level

C, C++, Assembly, Verilog, CAD

Web/App Development

Vue.js, React, JS, Flask, Flutter, HTML, CSS

EDUCATION

University of Waterloo

BASc Candidate | Class of 2024

Systems Design Engineering (SYDE)

ACHIEVEMENTS

CUTC Tech Lead

2021 Jun

Led a team of developers for the Canadian Undergraduate Technology Conference

SHAD Valedictorian

2019 Jul

Voted by 64 other University of Calgary SHAD program members to represent the group.

Community Engagement

2019 Jun

Awarded for exemplary community involvement & participation in a wide range of extra-curricular activities.

[🔗 danielraymond.me](https://danielraymond.me)

[📺 /in/dr Raymond63](https://in/dr Raymond63)

[📺 /dr Raymond63](https://t.me/dr Raymond63)

[✉ daniel.raymond@uwaterloo.ca](mailto:daniel.raymond@uwaterloo.ca)

[📄 danielraymond.me/DER.pdf](https://danielraymond.me/DER.pdf)