# **Sooham Rafiz**

Avionics Engineer. Web Developer. Research Assistant.

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% github.com/sooham

# **EXPERIENCE**

#### **Avionics Engineer**

University of Toronto Aerospace Team, Rocketry Division

UTAT's rocketry division builds high-altitude sounding rockets.

• Using Arduino microcontroller and ICs, I developed hardware and software for recording flight-critical sensor outputs.

#### Web Development Intern

#### Careerleaf Inc.

Careerleaf simplifies online hiring for jobseekers and employers alike.

- Developed a job management module using AngularJS. Currently used in production.
- Improved site reliability by writing automated unit tests for company's frontend and backend.
- Improved resume scraper efficiency from 31% to 78% on representative sample.
- Liaised with development team and product manager to fulfill client requests regarding UI, backend and job analytics. i.e UI customization, reducing site downtime.
- Worked on a development team using SCRUM.

### Undergraduate Research Assistant (CSC299)

#### **University of Toronto**

i June 2015 - Aug 2015 ♥ Toronto, Ontario

Explored Video Games as a medium for teaching Computer Science with Dr. Steve Engels.

- Created Unity3d games focused on sequential thinking and Data Structures.
- Created an 'Indiana Jones'-esque game teaching Bash without any libraries (only Applescript and Bash).
- Demonstrated Unity3d games can be of pedagogical value towards Computer Science education whilst being fun.

# **EDUCATION**

Computer Science Honors B.Sc.

**University of Toronto** 

GPA **3.57** / 4.00

🛗 Sep 2014 - Apr 2018

# **SKILLS**

Languages: C / C++, Python, Javascript, Java, HTML5, CSS3.

Web: MEAN, React, jQuery and other JS libraries. AWS. Django. Webpack. REST APIs. OAuth.

Al: Neural Networks. Clustering. Object Recognition. Tensorflow, numpy, scipy and openCV.

Quality Assurance: Unit Testing, User Testing, Code Reviewing.

Other: Data Structures. Git, SSH, Linux.

# **PROJECTS**

#### Inpainting (Open Source)

Open-sourced only known implementation of Criminisi et al's inpainting algorithm, used to remove regions of an image.

#### MapReduce Engine

A simple Map Reduce engine in C demonstrating MIMD parallel computing across processes.

#### sooham.com (Blog)

My own blog without any static site generators. Uses React.js, Express.js, Webpack and Heroku.

# GraphFlow (3D game)

A 3D Unity game exploring sequential thinking and Data Structures. Built with C# and JS.

### **Browser Engine**

Implemented a toy Browser engine for the Altera DE1 FPGA in Verilog.

Awarded perfect score as final project.