**Alec Rosenbaum**

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Conshohocken, PA 19428 Github: alecrosenbaum

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**EDUCATION**

**Swanson School of Engineering**, **University of Pittsburgh**; current student; expected graduation Dec 2017

Major: Computer Engineering – **GPA: 3.693 – Major GPA: 3.98**

Awarded Honor Student Designation within Swanson School

**SKILLS**

**Languages:**

Experienced: Python, SQL (experienced); Java, HTML/CSS, JavaScript (proficient); C, C++ (prior exposure)

**Software:**

Django, Git/Github, Sublime Text, Lint, Ansible, Jupyter/iPython, Flask, Numpy, matplotlib

**PROJECTS**

**Elevator Simulation and Analysis (Course Project)**

* Implemented an event-based simulator in Python that logs actor's state changes to a local database.
* Performed analytics using SQLite, Python, and matplotlib to explore how different elevator algorithms influenced queue lengths, wait times, service times, and correlations between these elements.

**Passive Notifications for Bus Arrival Times (Individual Project)**

* Wrote Flask server that interfaces with Port Authority's API to serve stop predictions as RSS.
* Parsed RSS and created a passive notification that updates while at home using Tasker.

**EXPERIENCE**

**Formlabs,** Somerville, MA **May 2017-August 2017**

Software Engineering Intern

* Improved manufacturing sofware that enables automated calibration and testing using Python.
* Analyzed manufacturing data and correlated defects, software changes, device usage, and line operators.
* Wrote, documented, reviewed, and deployed code integrated with Github

**change2target,** Greer, SC **August 2016-April 2017**

Engineering Data Analyst Co-op; member of team developing web-based data analysis software

* Invited to continue BMW Manufacturing Co-op as a remote, part-time team-member.
* Designed and developed Django-based automated reporting and analytics software.

**BMW Manufacturing,** Greer, SC **January-May 2015, January-August 2016**

Engineering Data Analyst Co-op; member of team developing web-based data analysis software

* Designed and developed Django-based automated reporting and analytics software.
* Solved systems-level problems to increase reliability, maintainability, and speed.
* Wrote an automated daily reporting framework using Python.

**National University of Singapore Research Assistant,** Singapore **Summer 2015**

Research Assistant; member of team developing nerve-based neuro-prosthetics

* Implemented a UART communication protocol for custom hardware used in neuroprosthetics using C.
* Lab developed custom hardware and performed testing on-site using primates.

**DEKA Research and Development Corporation,** Manchester, NH **Summer 2014**

Computer Engineering Intern; member of team developing software for clients in medical device industry

* Developed automated tests for android-based medical device controller prior to FDA approval submission.
* Created and maintained detailed documentation for all development goals and software changes.