Alec Rosenbaum

218 Ford St
Conshohocken, PA 19428
alecr95@gmail.com

484-250-4418
Github: alecrosenbaum
Online Resume: alecrosenbaum.github.io/resume

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 Android 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.