

Marcus Todd

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EDUCATION

CARNEGIE MELLON UNIV.

B.S. IN COMPUTER SCIENCE

Expected May 2017 | Pittsburgh, PA
Minor in Photography

LINKS

Github:// [malexandert](#)
LinkedIn:// [Marcus Todd](#)

COURSEWORK

UNDERGRADUATE

Constructive Logic
Web Application Development
Principles of Software Construction
Principles of Functional Programming
Great Theoretical Ideas of CS
Mathematical Foundations of CS

SKILLS

LANGUAGES

Proficient:

Python • Scala • Java • Standard ML

Familiar:

C • JavaScript • Haskell

TECHNOLOGIES

Proficient:

Git • Django • Heroku

Familiar:

Play • Akka

EXPERIENCE

ORIGINATE | SOFTWARE DEVELOPMENT INTERN

May – August 2015 | New York, NY

- In partnership with the company NewAer, developed features and fixed bugs for the NewAer API backend using Scala
- Implemented a garbage collection utility to allow the server to properly delete old devices on the database
- Contributed to Scalypher, a Scala-based DSL for writing Neo4j Cypher queries, to allow it to support queries for nodes in the database with no relationships

GOOGLE | SOFTWARE ENGINEERING INTERN

May – August 2014 | Mountain View, CA

- Optimized the test generation and test result collection procedure for the Google Fiber TV UI by helping develop a model-based testing framework
- Implemented the utility to run the randomly generated tests and collect and export their results using Python

PROJECTS

A WEB GUIDE TO GETTING LOST | 15-437/15-637 FINAL PROJECT

May 2015

Created a website idealistically based on Rebecca Solnit's book A Field Guide to Getting Lost that allowed users to randomly generate a path in an area of their choosing. Users would then follow the path in real life while logging their thoughts on the on-site journal. The backend was developed using Python and the Django Framework. The frontend was developed using Bootstrap and the Google Maps Javascript API.

CARNEGIE MELLON BIOROBOTICS LAB | RESEARCH UNDER PROF. HOWIE CHOSET

Fall 2013

Worked with robotic snakes under Professor Howie Choset; learned to care for the snakes physically and also modified the snake protocol file to support new "snaser" (snake laser) hardware.

EXTRACURRICULARS

WRCT: A RADIO STATION

Student-run radio station at Carnegie Mellon

Fall 2015 - Fall 2016 Program Director

Fall 2014 - Fall 2015 Assistant External Music Director

Spring 2014 - present Air-cleared DJ

DELTA UPSILON CARNEGIE CHAPTER

Non-secret social fraternity on campus

Fall 2015 - Spring 2016 Vice President of External Relations

Fall 2014 - present Service Chair

Spring 2014 - Fall 2014 Executive Vice President