

# Michael James Murphy

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## Education

May 2017 **Carnegie Mellon University**, *Pittsburgh, PA*, QPA: 3.6.

Bachelors of Science in Computer Science, Minor in Music Technology

Selected Coursework: Compiler Design, Machine Learning, Foundations of Programming Languages, Program Analysis, Probability and Computing, Production Audio, Electronic and Computer Music, Multitrack Recording, Editing and Mastering, Solfege, Harmony, Eurythmics

## Skills

Languages: Python, OCaml, SML, Java, C, C#, bash, JavaScript, HTML,  $\LaTeX$

Libraries: Jane Street Core, ROS, Django, Bootstrap, Qt

Audio: Pro Tools, Finale, Reason, Logic

## Work Experience

Starting Fall 2017 **Embedded Software Consultant Engineer**, *Green Hills Software*, Santa Barbara, CA.

- Will work to help Green Hills customers with the GHS compiler, OS, IDE, and other products

Summer 2015 **Software Engineering Intern**, *WhatsApp*, Mountain View, CA.

- Worked on the Windows Phone team implementing networking protocols and improving reliability

## Teaching Experience

Summer **Teaching Assistant**, *Various Courses*.

- 15-110 Principles of Computing: Summer 2014

Summer 

- 15-122 Principles of Imperative Computation: Fall 2014, Spring 2015, Summer 2016

2016 

- 15-131 Great Practicals Ideas in Computer Science: Fall 2014, Fall 2015

- 15-150 Principles of Functional Programming: Summer 2016

Spring 2014 **Peer Tutor**, *CMU Academic Development*, Pittsburgh, PA.

- Present
  - Assisted with homework and explained material from various courses on a weekly basis

## Research Projects (CORAL Research Group, Professor Manuela Veloso)

Summer **Robot UI**.

- 2013
  - Designed and coded a new UI for the CoBot mobile service robots using ROS

- Implemented a linux touch interface using Python and Qt

Summer **Robot Log Explorer Site**, *data.cobotrobots.com*.

- 2014
  - Implemented a script to parse log data from CoBot mobile service robots into a database

- Designed a website using this database to search logs across many categories including coordinates visited, and to display and graph the results

## Projects

Fall 2014 **Adaptive Interval Tutor**, *ait.michaeljamesmurphy.com*.

- Worked with three people to create a web app to train users' ear for musical intervals

- Designed a probabilistic intelligent tutoring system to add adaptive difficulty

## Activities

Fall 2015 - **Sergeant at Arms and Second Vice President**, *CMU KGB*.

Spring 2017 

- Ran games and/or events (sometimes attended by 100+ people) for the org at least once a week

- Assisted with building a booth, maintaining website and server infrastructure, and ordering shirts