

# Mohammed Kumail Jaffer

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US Citizen

## Education

**CARNEGIE MELLON UNIVERSITY** – CLASS OF 2017

**B.S. Computer Science, Minor in Mathematics** – GPA 3.74

Build18 Hackathon Organizer, Member of Mock Trial Team

*Coursework:* Machine Learning, Deep Reinforcement Learning, Operating Systems, Advanced Algorithms, Quantum Computation, Extremal Combinatorics

## Experience

**TEACHING ASSISTANT FOR OPERATING SYSTEMS** – SPRING 2017

- Held office hours and graded student work for a class about the design and implementation of an operating system kernel
- Major focus on principled software design

**RESEARCH ASSISTANT FOR ARIEL PROCACCIA** – FALL 2016

- Studied axiomatic properties of selection mechanisms in alternative models to the Condorcet random noise model
- Work to be used on Robovote.org

**SOFTWARE DEVELOPMENT INTERN, AURI** – AUGUST 2016

- Developed a content management platform for Japanese artists
- Used Django and React

**RESEARCH ASSISTANT FOR ANIL ADA** – JUNE/JULY 2016

- Studied the communication complexity of composed functions in the “Number-on-the-Forehead” model, in an effort to understand the relationship between the complexity classes P and  $ACC^0$

**SOFTWARE DEVELOPMENT INTERN, EXP II** – SUMMER 2015

- Developed a crowdsourced platform for online education
- Participated in a major refactoring of the codebase to bring it in line with best practices
- Used Flask, React and Backbone.js

## Projects

**WHISK**

An app that forces you to go on adventures by machine learning your recreational preferences and automatically calling you an Uber to a place you might like.

BigRedHacks Fall 2015 Best Uber Hack

**BODYGUARD**

A Parrot drone mod that follows you around, and allows you to use the Myo armband to fly it and fire a mounted rubber band gun with arm gestures.

PennApps Winter 2015 Top Ten Hack

**LISTENUP**

A status bar app that ducks the system volume when the microphone picks up talking, allowing maintenance of situational awareness while listening to music.

PennApps Fall 2014 “Best Hack People Will Use Everyday”

**OMNIBOARD**

An application that allows you to use a Wii remote and an infrared LED to turn any surface into a touchscreen.

HackPrinceton Fall 2013 3rd Place Hardware Hack

## Skills

Python, C, C++, Javascript, Matlab, Numpy, Tensorflow, Django, React, Linux, Urdu, French