

# Hardy Pham

949-529-7777 • h6pham8@gmail.com • hardypham.herokuapp.com

## Work Experience

### Zulip

(May 2017 - Present)

#### Open Source Contributor

- Developed new features for Zulip's open source chat application
- Designed backend fixes to address bugs
- Increased testing coverage through unit and functional tests

### Shazam

(July 2016 - Sept 2016)

#### Software Engineer Intern • San Diego, CA

- Maintained and developed the music submission control panel
- Designed a new upload system, saving the upload team 20+ hrs of work per week
- Designed REST APIs to parse and update music track information
- Created front-end features to improve user efficiency
- Refactored backend APIs, improving code maintainability and readability

## Projects

### Inertial Guidance System

- Created a system that interfaces an IMU to provide users with sensor readings
- Designed a desktop control panel with Python's GUI toolkit
- Implemented the control panel's backend to support all of its features
- Project was sponsored by ViaSat

### Trivia Trip

triviatrip.herokuapp.com

- Created a web app that showcases a variety of trivia questions
- Implemented a scalable interface for cross device usage

### Head Controlled Wheelchair

- Designed a wheelchair system that utilizes head motions to control a motor
- Wrote scripts to parse and aggregate head movement coordinates
- Optimized scripts to acquire images, increasing acquisition rates by 500%

### Micromouse

- Created an autonomous robot that navigates and solves a 16x16 maze
- Implemented a flood-fill search algorithm to navigate and solve the maze
- Designed a PID controller to stabilize straight forward movement

## Education

**University of California, San Diego**  
Electrical Engineering  
2017

## Expertise

### Languages

Python (Proficient)  
Java  
PHP  
Javascript  
HTML CSS

### Tools

Git  
jQuery  
Jira  
Unix  
AJAX  
Laravel  
NodeJS

### Courses

OOP  
Data Structures  
Algorithms  
Discrete Math

### Others

Agile Development  
Design Patterns  
Unit Testing