

web developer and roboticist

oscar@bezi.io (864) 344 8965 http://github.com/bezi http://bezi.io

languages

extensive

Javascript

CSS. HTML

proficient

Bash

Java

LaTeX

C++

Matlab

extensive

Node.is

React

Redux

Linux

Gulp

technologies

education

Carnegie Mellon University Pittsburgh, PA

BS in Computer Science, Minor in Robotics. Graduation: May 2017

tech experience

HEBI Robotics, Inc. 2015-now. Pittsburgh, PA

Software Engineering Intern, web services and firmware.

- Created web platform to manage and deploy robot firmware (React/Node.js)
- Implemented decryption utilities in robot firmware (C)

Microsoft Corporation 2015. Redmond, WA

Software Engineering Intern, Audio Quality

- Built tool to better understand Windows audio state for debugging (C#)
- Voted best intern project, OSG SiGMA

ScottyLabs 2013-now. CMU (Student Org)

Director of Operations

- Operations: operated ScottyLabs' services which open data for the CMU community
- Tech: project lead for TartanHacks ('15, '16), Print@ScottyLabs, APIs@ScottyLabs
- Leadership: led three separate teams of students for the projects

Biorobotics Laboratory 2013-now. Carnegie Mellon University

Embedded Systems, System Administrator. Working under Dr. Howie Choset

- Administrative work: managing new members and overseeing the JumpingBot group
- Firmware development: rewrote firmware architecture to improve modularity, which allowed four separate hardware platforms to use the same firmware (C++)

proficient teaching assistant experience

Robot Kinematics and Dynamics (16-384) Fall 2016

- Wrote extensive background materials for student use
- Designed and tested six robotic arm manipulation labs to provide hands-on experience
- Held office hours and grading sessions

Introduction to Robotics (16-311) Spring 2015

- Updated homeworks with additional background materials and a standard presentation
- Designed and ran a computer vision lab, with rapid feedback from autograding
- Held office hours, ran weekly labs, and grading sessions

Rapid Prototyping Technologies (15-294) Fall 2016

• Assisted students during class with Solidworks, 3D printers, and laser cutters

CrashCourse 2015

talks given

CClub Talk Series

CoffeeScript 101

Node.js 101

Docker and Fig 101

Intro to HTML & CSS Advanced Vim Usage

WebDevWeeks 2015

Deploying Your Site

hackathons

TartanHacks III*,IV*,V*
Battle of the Hacks '15
MHacks IV
HackPrinceton '13, '14
HackCMU '13, '14*, '15*
*mentor

select engineering projects

APIs@ScottyLabs 2015. ScottyLabs (CMU)

- Designed and developed several APIs for CMU community data access
- Released dining, directory, and course data for student use (Node.js, Google AppScript)
- Deployed the services and maintained uptime for long-term use

TartanHacks Infrastructure 2014-2016. ScottyLabs (CMU)

- Built hacker registration, notifications, and resume aggregation (React, ES6)
- Deployed and managed operations with Nginx

SEASnake 2014. CMU Biorobotics Lab

- Rewrote existing firmware architecture to use a modular driver system (C++)
- Applied the architecture to all of the robotics platforms in the lab
- Implemented virtual x86 module for unit-testing firmware