JOSH MOAVENZADEH

EXPERIENCE

Facebook
Summer 2018

Software Engineering Intern

Goodwill Infra – Personalized Video Team
- Developed improvements for a distributed job scheduler
- Built an automated load test framework
- Redesigned and incorporated an alarm remediation system
- Created a UI for managing config files from internal tools

IHMC Robotics
Summer 2017

Software Engineering Intern

Simultaneous motion planning for robotic arms
- Created a bidirectional RRT algorithm for trajectory generation
- Integrated 3D collision detection and obstacle avoidance
- Improved upon path smoothing and optimization techniques
- Began developing a real-time continuous planner

Multi-robot box pushing with mobile robots
- Built a controller API for autonomous mobile robot navigation
- Implemented a geometric path-forming algorithm

Carnegie Mellon SCS
Jan 2017 - May 2018

Teaching Assistant

15-213 Introduction to Computer Systems   (Spring 2018)
- Intermediate course covering machine-level code, memory organization and management, networking protocols, and concurrent computation

15-112 Fundamentals of Computer Science   (Fall 2017, Spring 2017)
- Introductory course covering recursion, object-oriented programming, and efficiency analysis

EDUCATION

Carnegie Mellon University
Aug 2016 - May 2020

Bachelor of Science (B.S.)
- Major: Statistics and Machine Learning
- Minor: Computer Science
- QPA: 3.7 / 4.0
- Dean's List: Spring 2018, Fall 2017, Fall 2016
- Coursework:
  - 10-605 Machine Learning with Large Datasets
  - 10-601 Introduction to Machine Learning (Master's)
  - 15-351 Algorithms and Advanced Data Structures
  - 36-402 Advanced Methods for Data Analysis
- Organizations:
  - Data Science Club: Vice President of Events & Webmaster

CONTACT

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SMC 6137
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SKILLS

Python

C

Java

R

PHP/Hack

HTML/CSS

PROJECTS

AR Climbing
- Interactive head-to-head game projected on rock climbing walls using Microsoft Kinect
- Finalist from 400+ submissions
- Received Judge's Choice Award from APT
- Featured on FloClimbing

CtrlCore
- Smart home hub with interactive projection display using Leap Motion
- TartanHacks finalist
- Received Rockwell Automation's Impact Award