

Diego Martinez

diegomartinez.me | diegom@alumni.cmu.edu | Pittsburgh, PA

EDUCATION

Carnegie Mellon University, Pittsburgh, PA

M.S. in Electrical and Computer Engineering | **Graduating May 2021**

GPA: 4.00/4.00

B.S. in Electrical and Computer Engineering | **Graduated May 2020** [University Honors]

GPA: 3.65/4.00

Skills: Software/API Design, Computer Graphics, Computer Vision, Cloud Computing, Embedded Systems, Web Dev

Tools and Languages: Java, Python, C/C++, Golang, JavaScript, Bash, ARM Assembly, Git, OpenCV, Arduino, RPi

WORK EXPERIENCE

Google[X], Mountain View, CA

Summer 2020

AI Resident: The Everyday Robot Project

- Researched new robotic grasp representations that used graphical data embeddings in images. Discovered that projecting gripper based on base-vel improved performance on an end-to-end RL grasping policy by 4% on average.

Google[X], Mountain View, CA

Summer 2019

Robotics Software Intern: The Everyday Robot Project

- Developed a Virtual Reality interface to remotely teleoperate robots through human movement. This interface is actively being used to collect data to enable robots to autonomously learn to perform new tasks.

Google, Mountain View, CA

Summer 2018

Software Engineering Intern – Chrome Team

- Developed a suite of static analyzers for Tricium, an automated code review tool for the Chrome open source project.
- The analyzers run 1,000's reqs/hour and have generated hundreds of automated comments across Chrome dev teams.

Carnegie Mellon University, Pittsburgh, PA

Fall 2018

Teaching Assistant – 17-214: Principles of Software Construction

- Taught concepts of design for complex systems, object-oriented programming, robustness and concurrent software.
- Held recitations, office hours and course-wide exam review sessions for 100+ students.

Microsoft, Redmond, WA

Summer 2017

Explore Intern – Identity Team

- Spearheaded the technical specification, user experience design and implementation of the cloud-based backup/restore and profile picture updating features on the Microsoft Authenticator Android app.

PROJECTS

Vitae | React + Django web app where users can generate profiles to showcase their professional experiences. **Dec 2020**

WonderPy | Python API designed to provide intuitive programmatic access to the CDC's WONDER datasets. **Dec 2020**

Scotty3D | Interactive graphics software capable of mesh editing, realistic ray tracing and dynamic animation. **Nov 2020**

InFrame | Robotic camera capable of real-time object detection/tracking to follow targets across 3D space. **May 2020**

STM32-MC Kernel | Real-time kernel capable of task scheduling, memory protection and synchronization. **Dec 2019**

MirrorX | Smart two-way mirror with facial recognition login that shows daily calendar, news and weather. **Jan 2019**

Navlab Research | Analysis of cars and pedestrians using object detection, optical flow and segmentation. **May 2018**

GTAutonomous | GTA V self-driving car that uses CV to process game images and simulate keyboard input. **Dec 2017**

ScreenBacklight | Ambient lighting system with multiple operation modes mounted to the back of a laptop. **May 2017**