

Adithya Bellathur

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EDUCATION

University of Southern California – Undergraduate and Masters *Graduating May 2021*
Graduate Degree: M.S. Computer Science **GPA:** 3.83
Undergraduate Major: B.S. Computer Science **Honors:** Presidential Scholar, Dean's List
Undergraduate Minor: Classical Guitar Musical Studies

SKILLS

Languages: Python, C++, Java, NodeJS, React Native, HTML/CSS

Tools: Computer Vision (*OpenCV*), Machine Learning (*Tensorflow, Keras, Pytorch*), Flask, Natural Language Processing (*NLTK*), Kafka, ROS, Arduino, Raspberry Pi, IOT, SQL and NoSQL Databases

EXPERIENCE

USC Robotics Embedded System Lab – Research Assistant *Mar 2020 - Present*

- Expanding and maintaining MetaWorld, an open source library for meta-reinforcement learning.
- Developed Scripted Policies for ensuring environment quality and collaborated with researchers in Stanford and UC Berkeley to update all environments.

Bloomberg – Software Engineering Intern *Jun 2020 – Aug 2020*

- Created Anomaly Detection ML pipeline and real-time inference module to recognize anomalies in user activity data on the Bloomberg Enterprise Console.
- Trained an LSTM Model to predict future activity data accurate within ~2% on any given time series input.
- Created library to easily train and deploy models on data that flows through the team's existing system.

Beyond Limits – Software Engineering Intern *Jun 2019 – Aug 2019*

- Developed computer vision model to detect rust and corrosion using Tensorflow and Keras in order to identify dangerous areas on large industrial structures. Tuned model to ~92% accuracy, and run on the MAG robot to evaluate live camera footage with detection model.
- Processed raw LIDAR data to identify and classify hazards in the path of the robot.

USC Center for Artificial Intelligence in Society – Research Assistant *Sept 2018 – Aug 2019*

- Automated production of segmented ground truth computer vision datasets of animals and poachers using OpenCV in order to aid in the real-time capture of poachers in Africa using drones.
- Investigated domain adaptation to improve accuracy of dataset using simulated images.

Amazon – Software Development Engineer Intern *May 2018 – Aug 2018*

- Designed a multithreaded, scalable, and modular system to preemptively grade and detect fraudulent merchants using ~12 different sources and intelligent web scraping and Natural Language Processing.
- Created framework for the system to be modified and upgraded in the future.

Aruba Networks, HP Enterprise – Software Developer Intern *Jun 2017 – Aug 2017*

- Automated SQL Database migration for Niara Timeline, which uses Big Data to detect security risks.
- Expanded functionality of Logger, our open-source log parsing engine.

RupertBot, now Passage.AI – Intern *Oct 2016 – Dec 2016*

- Executed the development of demo chatbot for Levi's, which resulted in a meeting with the company.
- Designed new interactive search functionality, wrote web scraper to find relevant information.

PROJECTS

See more projects at <http://adithyab.me>

Harbor Health – Winner at HR Hackathon Online, 2nd place at HackForHope (*Flask, Firebase*) *Apr 2020*

- Created group health monitoring sensor platform that integrates with new startup LifeSignal's disposable sensor to monitor the health of frontline healthcare workers during the COVID-19 pandemic.
- Built sensor validation system to allow for any new health sensor to provide metrics for future expansions

Finch – Winner at HackSC 2020 (*Python, Javascript, Natural Language, Xpring SDK*) *Feb 2020*

- In collaboration with the Emmerson Collective, built a phone operated AI lawyer for detained immigrants to contact, which is collects information to help lawyers build a case.

Dash – Winner at HackSC 2019 (*Python, Pytorch, FastAI, CoreML, Polarr SDK*) *Apr 2019*

- Trained a convolutional neural network from scratch to automatically recognize car crashes.
- Integrated Apple's CoreML and Polarr SDK with model to run crash detection locally on an iPhone.

Dog Entertainment System (*Raspberry Pi, CAD, HTML, OpenCV*) *Jan – Apr 2018*

- Built an autonomous, self-reloading tennis ball catapult to play with your pet when you are not home.

LEADERSHIP

Lavalab – Co-Founder and Developer of Bubble, Fall 2018 Cohort *Sept 2018 – Present*

- Led development of music ideation app 'Bubble' for artists to quickly iterate on melodies - presented at Capitol Records HQ, created through USC's premier student-run incubator.

Makers – Director of Programming, Director of Marketing, Asst. Dir. Outreach *Oct 2017 – Present*

- Organized tutorials on range of technical subjects and managed all project managers.

OTHER INTERESTS

Classical Guitar: Classical Guitar Minor & Guitar Orchestra member at USC, PMA Guitar Ensemble Concert Master, 17 years training.

Art and Design: 13 years of formal and self-taught training.

Robotics Mentorship: founded non-profit that has reached over 200 students. Mentor FIRST robotics teams.