David Santana

github.com/SpokenBanana • spokenbanana.github.io
santananvidda@gmail.com • 336.263.8084

EDUCATION

The University of North Carolina at Greensboro (UNCG) • B.S in Computer Science
August 2014 - May 2018 • Greensboro, NC • Magna Cum Laude • Dean's List & Chancellor's List • GPA 3.79

EXPERIENCE

Google • Software Engineer Intern
May 2017 – August 2017 | Chapel Hill, NC

- Worked in the Streetview team. Built a convolutional neural network to accurately detect the roll and pitch of panoramas. Used for fixing user uploaded panoramas which often had inaccurate roll and pitch measurements.
- Implemented the VGG-19 model and curated training data to effectively train model.
- Integrated the model into a production pipeline which ran on 30k+ panoramas every day.

UNCG • Research Assistant
August 2016 – May 2017 | Greensboro, NC

- Used various machine learning algorithms such as Deep Learning and Random Forest to detect botnet attacks within a network using the CTU-13 dataset.
- Trained and tuned each model to achieved up to 99% accuracy. Paper was accepted to SAM 2018 conference.

Google • Engineering Practicum Intern
May 2016 – August 2016 | Mountain View, CA

- Designed and implemented a type schema system to one of Google's largest indexing repository system.
- Integrated this new system into various debugging tools at Google that used the repository.
- Added a new way to filter rows in the repository by using a SQL-like language and used our new schema system to resolve column names.

Multigen Diagnostics • Contract Programmer
January 2016 – January 2017 | Greensboro, NC

- Developed a desktop program using PyQT that analyzed DNA files and displayed findings to user.
- Meet weekly with client to give updates on project and receive new features to add.

PROJECTS

Pawdoption

- Like tinder but for pets! A mobile app that let's you swipe through pets from your local animal shelters.
- Build using the Flutter SDK and PetFinder API. Launched on Google Play.

Physics on Paper

- Given a picture of a drawing, it will use computer vision find the shapes and use Box2d to treat them as physical objects.
- Used the ear clipping algorithm to convert concave shapes to convex as Box2d couldn't handle concave shapes.

Rate My Genie

- A Chrome extension that adds ratings from RateMyProfessor to my University's course listing page.

SKILLS

Programming:
Java • HTML5 / CSS • JavaScript • C++ • Python • Git • SQL

Related Activities
ACM club member, STAMPS scholar