

# Daniel Shats

☎ (786) 508-9269 | ✉ danielshats1@gmail.com | 🏠 <https://smartdanny.github.io/> | 🌐 smartdanny | in danielshats

## Education

### University of Florida - Graduating December 2019

Gainesville, FL

COMPUTER SCIENCE & MATHEMATICS DOUBLE MAJOR, GPA: 3.5/4.0

May 2019

- **Computer Science Coursework:** Databases, Modeling and Animation, Natural Language Processing, Digital Logic, Software Engineering, Operating Systems, Math for Intelligent Systems, Machine Learning
- **Mathematics Coursework:** Sets and Logic, Discrete Math, Differential Equations, Abstract Algebra, Numerical Analysis, Linear Algebra, Advanced Calculus 1 & 2

## Experience

### CDM Smith

Boston, MA

ARTIFICIAL INTELLIGENCE INTERN

Jun. 2019 - Present

- Implemented a state of the art computer vision object detection, tracking, and re-identification model that significantly improved upon the accuracy and stability of their previous model. Currently working to finish optimizing the model and implement it into production.
- Worked with a team to label huge datasets to be used in model training and evaluation.

### UF Machine Learning and Sensing Lab

Gainesville, FL

UNDERGRADUATE RESEARCH ASSISTANT

Jan. 2019 - Present

- Assisted in writing the paper "Multi-Target Multiple Instance Learning for Hyperspectral Target Detection" by analyzing, optimizing, and testing the performance of various machine learning algorithms.
- Worked with electromagnetic and hyperspectral data.

### Rokitt Astra

Jersey City, NJ

SOFTWARE ENGINEERING AND DATA SCIENCE INTERN

May. 2017 - Aug. 2017

- Built a tool used to benchmark any Linux server's disk speed, written with python and bash. Tested on various Linux distributions using Vagrant.
- Researched and applied various methods of private data detection for GDPR compliance. Used machine learning and natural language processing to effectively classify over 10 unique types of personally identifiable information including addresses, phone numbers, names, and more.

## Projects

### hot\_budr

- Founder of a small lifestyle and technology company. We have given away thousands of stickers to people all over the world, sell shirts on Amazon, and make technology products in our spare time for fun. We also have an Instagram with 600+ followers managed by my team mate.
- Made an app that has 200+ downloads on Apple App Store and Google Play Store. It was built with Flutter, Dartlang, and Google Cloud Firestore.

### Swamphacks 2019 - Mobile Dating App for Dog Owners

- Three-person project that used Flutter to provide a modern UI, and the Google Cloud Vision API to verify images containing dogs.

### Raspberry PI Security Camera

- Detects faces of anybody walking into my room and will text me a picture of them to prevent roommates from stealing snacks from my minifridge.
- Uses raspberry pi, camera, and a python script with OpenCV to detect faces and Twilio to send MMS messages.

### Kaggle Competitions

- Achieved state of the art results on Cats and Dogs classification competition, Dog Breeds classification competition, as well as seedlings classification competition using the FastAI library and Pytorch.

### Courses Taken Outside of School:

- Completed FastAI's Practical Deep Learning course and Udacity's Intro to Machine Learning course.

## Skills

**Languages** Python, C++, Dartlang, Java, Bash, Matlab, MySQL

**Libraries** Pandas, Numpy, FastAI, PyTorch, Scikit-Learn, OpenCV, Matplotlib, Seaborn, Tkinter, PyQt

**Other** Flutter, Firebase, Linux, AWS, Vagrant, SolidWorks