# **ROHIT** MITTAPALLI

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#### **EDUCATION**

#### **Georgia Institute of Technology**

B.S. in Computer Science (Intelligence & Theory)

Graduation: May 2021 GPA: 4.00 / 4.00

Certifications: Coursera Deep Learning Specialization, Udacity C++ Nanodegree, Udacity Data Analyst Nanodegree Program

Awards: 1st at Citadel DataOpen at Georgia Tech, Vanderbilt Hackathon Most Disruptive Hack and Best Financial Hack

Coursework: Intro to Computer Vision, Robotics and Perception, Game AI, Intro to Artificial Intelligence, Systems and Networks

**EXPERIENCE** 

Adaptive Learning Lab January 2020 - Present

Student Researcher | Dr. Judy Hoffman

Atlanta, GA

- Researching techniques to develop a model bank capable of recommending transfer initializations in a data private and efficient manner
- Presented likelihood landscapes and a weighted Jacobian regularizer as a unifying principle behind adversarial defense at AROW@ECCV 2020
- Streamlined adversarial robustness research by creating a custom PyTorch testbench and building out accompanying visualizations

Cruise Automation [CANCELED due to COVID-19]

Software Engineering Intern | Perception Team

**Uber**Software Engineering Intern | Search Infrastructure

September 2019 - December 2019

- Optimized performance of all weighted queries searching for top results by 150x by integrating the WAND operator into Boolean queries
- Enabled queries to expand across geographic regions to maximize results and optimize performance by developing on Lucene infrastructure

Microsoft May 2019 – August 2019

Software Engineering Intern | PowerAl

Seattle, WA

- Built an expandable ML pipeline to visualize performance of feature engineering and selection methods against 8 datasets and 3 models
- Designed a genetic algorithm for feature selection achieving comparable and more consistent performance than current selection methods

BazaarVoice May 2018 – Aug 2018

Data Science Intern | Content Integrity and Insights Team

Austin, TX

Palo Alto, CA

- Automated 17.6% of all image moderation saving over \$65,000 per year by detecting copyright with 2 machine learning models
- Discovered drawbacks to photo quality rating by humans and created an alternate model with 74% accuracy deployed on AWS SageMaker

The Home Depot

Software Engineering Intern | Search Components Team

Jan 2018 – May 2018 Atlanta, GA

- Provided insight into the autocomplete system by analyzing the impact of recommended term diversity on autocomplete usage
- Removed bias from current metrics by using Word2Vec and an RNN for term diversity evaluation instead of Home Depot data

### PERSONAL PROJECTS

Citadel Data Opens February 2018 / July 2018

- Won \$20,000 at the Citadel hosted data open along with a team of 3 and invited to participate in the 2019 Data Open World Championships
- Analyzed city data to optimally place public service buildings in 6 cities across America using heatmaps and a random forest
- Examined the effect of the interconnectedness of an airline on its stability to external factors (e.g weather, fuel prices)

VeriResume June 2018 – May 2019

- Developed an applicant-driven resume verification platform (<u>demo.veriresume.co</u>) using React.js, Express, MongoDB and AWS services
- Marketed product using website (<u>veriresume.co</u>) to drive newsletter and gain feedback from recruiters

Stock Simulator (<u>stocksim.rohitmittapalli.com</u>)

October 2018

- Developed a 20-minute stock trading game for 12 teams of 4 using React.js and Firestore to teach basic stock trading to business fraternity
- Generated artificial news events and corresponding stock prices using a random bounded walk and a real-world beta volatility

**WeLocate—Vandy Hacks** (Most Disruptive Hack by RedVentures / Best Financial Hack by Capital One)

October 2017

- Developed a web app for small business owners to capture relevant data and use machine learning to find startup locations
- Created the machine learning model on AWS and used python scripts for data collection across multiple open APIs

#### **ACTIVITIES**

#### Alpha Kappa Psi - Professional Business Fraternity

Jan 2018 – May 2018

Vice President of Finance

- Managed a stock portfolio of \$15,000+ along with 3 other directors, receiving and filtering input from the 85+ member business fraternity
- Hosted personal finance workshops and stock simulations to teach investment strategies and educate them in other related subjects

## Computational Finance Club @ Georgia Tech

Nov 2017 - Nov 2018

Undergraduate Head | Treasurer

- Handled club account with student government, hosted industry professionals, maintained membership, and organized budgets
- Created undergraduate awareness of the club and initiative by hosting joint master and undergraduate computational contests

#### **SKILLS**

Languages: Python, C++, JAVA, C#, SQL, R, HTML/CSS, Spark, Javascript, MATLAB

Frameworks: PyTorch, Lucene, React.js, MongoDB, Keras, Firebase, Android Studio, TensorFlow, AWS ML Studio, Tableau