MIGUEL R. GARCIA

8705 Greeley Court | Springfield, VA 22152 | 571.405.7456 | mgarcia75@gatech.edu U.S. Citizen | Pending Secret Clearance

Education

Georgia Institute of Technology | Atlanta, GA

Bachelor of Science in Computer Engineering, GPA 3.42

Minor in Robotics

Skills

Programming: Proficient in C, C++, Python, MATLAB, Java | Academic Exp. in VHDL, Assembly, SQL/Excel, HTML/CSS/JS

Libraries: Proficient in NumPy, NetworkX | Academic Exp. in Keras, Pandas, TensorFlow, OpenCV, CVXOPT

Tools: Proficient in Linux/Docker, Google Colab/Jupyter Notebook, GitHub, Microsoft Azure

Academic Exp. in Wireshark, Metasploit, GrassMarlin, Vim, Altera Quartus

Professional Organizations: Air Force ROTC, Arnold Air Society, Georgia Tech Catholic Center

Awards

PEPCO: 2019 Intern of the Year (class of 30 interns), 2nd place in PEPCO Intern Presentation (2018, 2019), 2019 PEPCO Innovation Challenge Winner (lead a team of 5 engineering interns, created user interface prototype for electric car charging stations)

Air Force ROTC: Field Training Distinguished Graduate (Ranked 27th/496 in leadership ability through deployed environment) **Academic:** Dean's List (2017-2020), Provost Scholar (awarded to 50 incoming Georgia Tech freshman out of entire out-of-state application pool), Air Force ROTC Scholarship

Research

Opportunity Research Scholars - Raytheon

August 2019-Present

August 2017 - Present

Expected Graduation: May 2021

Undergraduate Researcher / Deep Learning, Convex Optimization

- Programmed novel technique for localizing desired features in the latent space of any generative model, utilizing CVXOPT and TensorFlow libraries
- Developed application integrating above localization technique, allowing a user to localize a desired feature from a generative model using paired comparisons

Professional Experience

QUALCOMM | San Diego, CA

May – August 2020

Software Engineering Intern / LTE Modem Layer 1

• In process of creating an embedded systems application analyzing call uplink traffic and linking relevant data to low-level modem processes, automating a task taking several hours

PEPCO | Bethesda, MD

June – August 2019

Software Engineering Intern / Control Center

• Authored Python program automating the generation of previously hand-made contingencies on any given power system using fundamentals of Graph Theory, winning "Intern of the Year" award and saving engineers about 10 hours per analysis!

PEPCO | Washington, D.C.

June-August 2018

Electrical Engineering Intern / Substation Engineering

• Created Java application resulting in automation of time-intensive breaker reliability calculations, earning 2nd in Intern of the Year competition

Key Coursework

- Computer Vision
- Computer Security
- Computer Communications
- Data Structures and Algorithms
- Object Oriented Programming

- Semiconductors
- Digital Design
- Hardware/Software Programming
- Linear Circuit Analysis
- Intro to Signal Processing