TROY L. CRAWFORD

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EDUCATION

THE UNIVERSITY OF GEORGIA TERRY COLLEGE OF BUSINESS, Athens, GA   2020-2021
MS – Business Analytics

THE UNIVERSITY OF GEORGIA FRANKLIN COLLEGE OF ARTS & SCIENCES, Athens, GA   2016-2020
BS – Physics, Computer Science
- GPA: 3.8 | Magna Cum Laude | Dean's List Recipient | Zell Miller Scholarship Recipient

TECHNICAL SKILLS

- Languages/Software: Python, C/C++, Java(FX), MySQL, R, SAS/SPSS, HTML/CSS, JavaScript, PHP, Fortran
- Frameworks: Machine Learning – [Keras, TensorFlow, PyTorch], WebDev – [Spring MVC, Bootstrap]
- Misc.: Git, Tableau, Xmgrace, LaTeX, Spyder, Eclipse, XCode, Visual Studio, R Studio, Terminal, AWS (S3)

EXPERIENCE

AEVEX AEROSPACE, Quincy, MA   2020-2020
Software Engineer - Intern
- Leveraged various machine learning techniques to monitor wildfire spread and the corresponding monetary damage to buildings in real time at more than 50 fps from drone video covering over 2544 sq. km. of aerial imagery (specifically by training the YOLOv5m model upwards of 20 times on varying hyperparameters)
- Combined object detecting neural networks and geospatial data manipulation in order to feed latitude and longitude coordinates to AEVEX's 3D visualization software in turn resulting in a demo for a possible client

Stock Scraper - Personal Data Analytics Project, Athens, GA   2020-2020
Creator
- Front to back data science project which utilizes essentially every aspect of the typical data science lifecycle
- Employs everything from web scraping & database management to exploratory data analysis & ML
- The end goal of this project is to construct LTSM neural networks, CNNs and traditional statistical models that incorporate both fundamental and technical indicators to forecast certain stock prices of interest

UGA SMALL SATELLITE RESEARCH LAB, Athens, GA   2019-2020
Flight Software Engineer
- Wrote tens of thousands of lines of flight software code in primarily C++ for the Multiview Onboard Computational Imager mission in a team of five software engineers, see http://www.smallsat.uga.edu

UGA PHYSICS & ASTRONOMY RESEARCH GROUP, Athens, GA   2019-2020
Researcher & Primary Author
- Published a research paper on de-excitation rate coefficients for proton and carbon collisions by using Fortran code, LaTeX and Xmgrace with Physics & Astronomy Department Head, Dr. Phillip Stancil

CAMPUS AND COMMUNITY INVOLVEMENT

Associate Member, **ACM / Data Dawgs / Data for Good / Deep Learning @ UGA,** Athens, GA   2019-2020
- Contributed to and attended roundtable discussions as well as seminars on various computing, data-related and deep learning principles and topics vastly increasing both interest and knowledge of each industry

Student Participant & Team Member, **UGAHacks 5 / HackGT 6,** Athens/Atlanta, GA   2019-2020
- Constructed an iOS application (Swift) by using object detection to increase everyday recycling (HackGT 6)
- Utilized MySQL, C++ & an Arduino to prototype a device designed for determining air quality (UGAHacks 5)

Associate Member, **Pi Kappa Phi – UGA Miracle,** Athens/Atlanta, GA   2019-2020
- Accrued over $20,000 to benefit children and young adults with mental and physical disabilities