

ATTICUS REX

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EDUCATION

Georgia Institute of Technology Master of Science in Computational Data Analytics • GPA: 4.0/4.0, MSA Fellowship Award Recipient	May 2024 Atlanta, GA
Virginia Tech Dual Degree: B.S. in Mechanical Engineering, B.S. in Computational Modeling & Data Analytics • GPA: 3.83/4.0, Awards: Summa Cum Laude, Honors Laureate Diploma, President's List	May 2023 Blacksburg, VA

EXPERIENCE

Georgia Tech College of Computing Graduate Teaching Assistant • Supported faculty with grading, Q&A and office hours in CSE 6040 - Computing for Data Analytics.	Aug 2023 – Present Atlanta, GA
NAVSEA Naval Surface Warfare Center Dahlgren Division Optimal Shock Damping for Improved Controllability of Antenna Test Fixture • Technical lead specialized team to design and implement novel vibration equipment to simulate shock pulses. • Achieved ~400% damping improvement and reduced cost by 80% compared to previous testing.	Aug 2022 – May 2023 Blacksburg, VA
Virginia Tech Department of Agriculture & Applied Economics Software Development and Data Analytics Intern • Developed software to survey conservation agriculture, oversaw the maintenance and storage of data, and worked in R and Python to conduct statistics, data analytics, and data visualization.	May 2022 – Aug 2022 Riobamba, EC
Virginia Tech Student Athletic Academic Support Services Math Lecturer, Tutor • Earned highest paid undergraduate position at Virginia Tech through calculus lectures. • Improved student grades by 20-30% on average and attended training to improve teaching.	Aug 2021 – May 2022 Blacksburg, VA
Virginia Tech Data Science for the Public Good Undergraduate Research Intern • Accomplished 96-99% accuracy predicting vegetative health using machine learning algorithms. • Reconstructed an eight-dimension poverty index for the Zimbabwe Statistical Agency and quantified poverty at the district and province level from 31,193 observations.	May 2021 – Aug 2021 Blacksburg, VA

PROJECTS

Evaluating Linearized Echo State Networks, SINDy Framework, and Direct Differentiation Methods for Dynamical System Modeling Advisor: Serkan Gugercin, Ph.D. • Successfully applied linearized Echo State Network models to improve chaotic dynamical system models. • Demonstrated ~20% more accuracy than SINDy when applied to the Lorenz System.	Aug 2022 – May 2023 Blacksburg, VA
Best Buy Project Week 2024 Competition First Place Winner • Implemented methodologies in data mining, dimensionality reduction, parallel computing, and visualization to develop a model that accurately categorized over 500,000 customer service transcripts.	Jan 2024 Atlanta, GA
Discovering Epidemiological ODE Models from Data CSE 8803 – Epidemiology Term Project, Instructor: B. Aaditya Prakash • Accurately and reliably recovered governing differential equations from noisy, nonlinear epidemiological data.	Aug 2023 – Dec 2023 Atlanta, GA

SKILLS & CERTIFICATIONS

Engineering: Fundamentals of Engineering (FE Mechanical) Certified, CFD/FEA, Solidworks, Controls
Data Science: Python (PyTorch, Tensorflow, Numpy, Pandas, Scikit-Learn, Dask), R, Tableau, SQL, MATLAB, Julia, C/C++, Java, Git, Linux, Optimization, Model Reduction, Parallel Computing, Web-Scraping
Languages: English (native), Spanish (fluent)