Jeremiah Thomas

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Education

University of Virginia — Charlottesville, VA
B.S. Systems Engineering, B.A. Physics, GPA: 3.71 — 2021
Minors in Computer Science and Design Integration

Selected Courses
Deterministic & Stochastic Decision Models, Statistical Learning and Graphical Models, Data and Information Systems, Principles of Modeling for Cyber-Physical Systems

Experience

Sandia National Labs — 2020
Systems Engineering Intern
- Working with many stakeholders to review and centralize knowledge
- Modeling system and requirements with GENESYS and MagicDraw

Intelligent Processing of Materials Group (UVA) — 2019-pres.
Research Assistant
- Modeling and simulating alloying process using Rivanna HPC cluster
- Processing and visualizing results with Python and Tecplot

University of Virginia Physics Department — 2020
Grader - General Physics 1
- Managed online grading system as first point of contact for 450+ students
- Created weekly homework solutions and proctored midterm

Center for Laser and Plasma for Advanced Manufacturing (UVA) — 2019
Research Assistant - NSF Funded Research
- Deposited thin films and characterized materials with lasers
- Analyzed and visualized data with Excel, Python, and Tableau
- Automated data collection from old equipment with Python

University of Virginia Information Technology Services — 2018-2020
Help Services Intern
- Migrated and updated internal troubleshooting knowledge base
- Reviewed employee actions to resolve internal and external complaints

Extracurriculars
- UVA Student Council — 2018-2020
  - Engineering Representative, Student Life Committee Member
- Engineering Student Council — 2017-2019

Projects

Automated greenhouse: automatic watering and cooling based on temperature and humidity
Arduino and C++ for local control, AWS, SQL, and Tableau for remote control

Blind: resume screener to reduce bias, 4th place at Disrupt the District
Python for natural language processing and regex

Circular ID: prototype clothing lifecycle tracker
AWS and SQL to store information and communicate with remote scanner and app

StyleGAN2: machine learning to generate art and carbon microstructures
Google Cloud and Rivanna HPC for model training, Python for visualization and data prep

Awards & Scholarships

Thermo Fisher Scientific Children of Employees Scholarship — 2017-2021
Barbara Darden Scholarship — 2020
Alwyn C. Lapsley Scholarship — 2018
National AP Scholar — 2017
National Merit Finalist — 2017