Timothy Asher

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Education

Virginia Tech

Expected Graduation DEC 2022, Blacksburg, VA, GPA: 3.53/4.0

Major: B.S. in Computer Science; *Intended Minor:* Organizational Leadership

Relevant Coursework: Software Design, Data Structures, Algorithms, Computer Organization, Linear Algebra, Discrete Math, Combinatorics, Statistics, Team Leadership, Management Theory & Leadership Practice

Highlights: Artificial Intelligence/Machine Learning Club, Developer Student Club, Galileo Engineering Living Learning Community, Marching Virginians

New Horizons Governor's School for Science and Technology (GSST), in conjunction with Thomas Nelson Community College

JUNE 2019, Hampton, VA

Relevant Coursework: Physics I, II, III, IV; Engineering; Calculus I, II, III; Environmental Science

Highlights: Junior and Senior Research

Experience

Research

JUNE 2018 – JUNE 2019, Governor's School for Science and Technology & NASA Langley Research Center

"Boundary Layer Manipulation Risk Reduction Test for the Tail-Cone Thruster"

- Tested several boundary layer configurations on fuselage model in transonic cryogenic wind tunnel
- Analyzed pressure and velocity data in Microsoft Excel
- Created plots to compare test data to computational fluid dynamics models

JAN 2019 – APR 2019, Governor's School for Science and Technology & Hampton Roads Tech Ramp

"Clean Energy Library"

- Researched clean energy methods and sustainable architecture
- Developed a model of a self-sustaining library capable of powering parts of the surrounding community
- Won the Green Award at the Hampton Roads Tech Ramp 2019 competition

OCT 2017 - APR 2018, Governor's School for Science and Technology

"Comparing the Cost-Efficiency of Desalination Techniques"

- Analyzed several chemical desalination techniques for production capacity
- Determined cost for each technique with controlled parameters

Blacksburg Move Out Madness / Consultant

JAN 2020 – MAY 2020, Habitat for Humanity NRV

- Worked with Habitat for Humanity NRV to develop a plan for off-campus furniture drop-off program
- Developed a logistics plan for Move Out Madness in the Terrace View community

National Transonic Facility / Data Analysis Mentorship

JUNE 2018 – JUNE 2019, NASA Langley Research Center

- Worked with NASA research engineers to test boundary layer manipulators for a model fuselage
- Analyzed data and created plots for presentation

FIRST Lego League Robotics / Team Mentor and Volunteer

SEPT 2012 – APR 2019, Grafton Bethel Elementary School

- Taught robotics, research, and teamwork skills to elementary-aged kids
- Volunteered as judge and referee at competitions

Skills

Programming: Java, Python, C, Git, Command Line, SQL, MATLAB

Computer: Minitab, AutoCAD, Inventor, Microsoft Office Suite, Google G Suite, Adobe Creative Cloud, Windows OS, Mac OS, Linux

Other: Spanish, Leadership, Presentation, Communication, Time Management, Problem-solving, Critical Thinking