Seth M. Lyles

slyles1001@gmail.com | **Williamsburg, VA** | **(740) 645-5739**

Education

College of William & Mary M.S. Operations Research | Williamsburg, VA | 2017-2019

- Merit-based funding increased to full scholarship after successful first year
- Teaching Assistant and grader for over 20 students in Calculus and Operations Research
- As Social Chair of the Graduate Student Association, organized Department and Graduate-wide activities
- Led team of 3 for collaboration on Python machine learning code base

Denison University B.A. Computer Science | Granville, OH | 2008-2012

- Earned Founders, Academic, and Alumni scholarships totaling over $100,000
- Denison Summer Scholars: Studied heirarchical job scheduling using multiple processors
- Minor in Mathematics and practical skills in Physics, Chemistry, and French

Skills

- Coding/Scripting: Python, R, MATLAB/Octave, Gurobi, SQL, Julia, AMPL, C++, JavaScript, VBA
- Environments: Visual Studio/Code, Vim, Jupyter, GitHub, Bitbucket, Distributed systems
- Fundamentals: Windows, Linux, OSX, Hardware Assembly

Experience

Lawrence Livermore National Laboratory Cybersecurity Summer Institute Intern | Livermore, CA | 2018

- Analyzed applicability of feature selection procedures and authored white paper on my recommendations
- Improved accuracy of Python machine learning models by improving parameters and feature subsets
- Implemented new feature selection algorithm in Python and analyzed performance metrics
- Documented and cleaned Julia's LightGraphs code base for transition to new version
- Presented Feature Selection techniques at Student Poster Symposium

Optis North America Lead Application Engineer | Seattle, WA | 2014-2015

- Acted as project manager while consulting for Zodiac Aerospace, Tesla Auto, NASA suppliers, Boeing Aerospace, Google, and others
- Developed python-based time-dependent model to simulate ultra-violet sterilization in a hospital
- Designed CAD model of a semi-truck display needle to outperform the uniformity distribution of a competitor
- Reduced simulation time by 75% while testing visibility/legibility metrics on a spacesuit control system display
- Optimized parameter configurations to simulate LIDAR system
- Sole engineer for over 40 North American accounts, all west territory

Optis North America Application Engineer | Troy, MI | 2012-2014

- Tested and demonstrated virtual reality systems, investigating ergonomic and aesthetic design considerations
- Developed and integrated virtual quality control tests pre-production, reducing customer's decision time by six weeks
- Managed and maintained dedicated Windows cluster for large-scale Monte Carlo simulations
- Expanded virtual prototyping webpages for compliance testing using Visual Basic and JavaScript
- Traveled extensively to give and receive training, including France, Mexico, England, Seattle, Portland, San Antonio