KEVIN FRANCIS

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EDUCATION

University of West Florida *August 2020 - May 2023*
M.S. Data Science
Department of Science and Engineering

Auburn University *August 2017 - May 2019*
M.S. Physics
College of Science and Mathematics

University of West Florida *August 2014 - August 2017*
B.S. Physics
Minor Mathematics
Department of Science and Engineering

QUALIFICATIONS AND SKILLS

Software	MySQL, MATLAB, Microsoft Office, VASP, Gaussian, NRLMOL, Cura
Languages	Python, R, SQL, Bash, LaTeX
Operating Systems	Linux/Unix Systems, Windows
Equipment	Oscilloscopes, Waveguides, Horn Antennas, Function Generators, Laser Systems, Optics

EXPERIENCE

IERUS Technology May 2019 -
Engineer | Scrum Master

· Work as a scrum master on a modeling and simulation software team
· Investigate and develop metrics to quantify software performance
· Use Python and MATLAB to automate tasks and create analysis tools
· Design and use tools to analyze radar signals

Air Force Research Lab May 2018 - August 2018
Researcher

· Investigated the RF emitted by filamention from different beam profiles
· Explored how different beam profiles behave in turbulence
· Characterized the long distance propagation for different beam types
· Used various lab equipment to align the laser and collect data
· Utilized python for image analysis on CCD images
· Applied signal processing techniques to find information about the emitted RF
· Organized and presented results in a technical document after completion

University of West Florida August 2016 - May 2017
Undergraduate Research

· Researched stable structures of boron nanoparticles
· Utilized Naval Research Laboratory Molecular Orbital Library (NRLMOL) to perform electronic structure and density functional theory calculations
· Presented results at multiple conferences

Brigham Young University June 2016 - August 2016
Researcher

· Searched for new stable ternary superalloys
· Applied cluster expansion techniques with UNiversal CLuster Expansion (UNCLE) software package
· Implemented density functional theory using Vienna Ab initio Simulation Package (VASP)
· Employed python scripts over a cluster for data analysis and job automation
· Compiled results into a technical document and presented results

Auburn University August 2017 - May 2019
Teaching Assistant

- Instructed students on conceptual and mathematical topics in physics and astronomy
- Develop and graded quizzes for labs

Northwest Florida State College August 2014 - May 2017
Mathematics Tutor

- Taught students how to solve problems in courses ranging from intermediate algebra to differential equations

HONORS AND ACHIEVEMENTS

Northwest Florida State College Mathematics Student of the Year 2014 - 2015

American Physical Society March Meeting Undergraduate Best Poster 2017

Dean's List: Fall 2013, Spring 2014, Fall 2014, Spring 2015, Summer 2015, Spring 2016

Vice President of University of West Florida's Society of Physics Students 2016