Kevin Francis

Engineer | Data Scientist

(256) 617 4174

kevinfrancis1.github.io

kevinfrancis1492@gmail.com

/in/kevinfrancis14

kevinfrancis1

Technical Skills

Programming | Software

Python • R • Atlassian Suite

Matlab • SQL • Git • Office Suite

BASH • C++

Education

MS, Physics
Auburn University
2017 - 2019 | Auburn, Alabama

BS, Physics
University of West Florida
2014 - 2017 | Pensacola, Florida

Relevant Coursework
Intro to Scientific Computing
Computational Chemistry
Database Systems
Statistical Modeling
Modeling in Regression
Machine Learning
Data Mining

Experience

May 2019 - Present · **Engineer** · Huntsville, AL · IERUS Technology

- Scrum Master
  - Manage a scrum team ranging from five to seven members
  - Responsible for communication between the team, product owners and leadership
  - Coordinate and plan work for upcoming sprints
  - Track current work and progress and report weekly
- Engineer and Analyst
  - Work as an engineer and analyst on a radar 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 perform signal analysis
  - Generate and modify scenarios for the software to run
  - Test the software to prepare for engineering releases and ground tests
  - Conduct root cause analysis on data from hardware-in-the-loop (HWIL) simulations

May 2018 - Aug 2018 · **Researcher** · Albuquerque, NM · Air Force Research Lab

- 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 obtain information about the emitted RF
- Organized and presented results in a technical document after completion

Aug 2016 - May 2017 · **Researcher** · Pensacola, FL · University of West Florida

- Researched stable structures of boron nanoparticles
- Utilized Naval Research Laboratory Molecular Orbital Library (NRL-MOL) to perform electronic structure and density functional theory calculations
- Python was used for task automation and analysis
- Presented results at multiple conferences

May 2016 - Aug 2016 · **Researcher** · Provo, UT · Brigham Young University

- 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

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| August 2017 | **Teaching Assistant** | Auburn University |
| May 2019 | Auburn, AL | |

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