**Sarah G. Francis**

sarahgailfrancis@gmail.com

**OBJECTIVE**

Goal-oriented and ambitious Ph.D. student in Nuclear Engineering seeking fellowship and employment opportunities in data science or healthcare

**EDUCATION**

The University of Wisconsin- Madison, Madison, WI 2019 – 2024

*Doctor of Philosophy in Nuclear Engineering (In Progress)*

* Research Focus: optics, electronics, photonics, and nanofabrication
* Graduate Engineering Research Scholar Fellowship
* Special Library Association Conference 2020 SPIE Engineering Student Stipend Award

Jackson State University, Jackson, MS 2013 – 2014

*Master of Business Administration*

* Analyzed a 5,000-entry dataset to optimize primary care provider-patient communications

Howard University, Washington, D.C. 2010 – 2013

*Master of Science in Physics*

* Completed an internship at NASA Goddard Spaceflight Center quantifying solar flares to track the Hale Cycle
* Completed summer program at NIST in Neutron Spin Echo, Small Angle Neutron Scattering (SANS), and Polarized SANS

Xavier University of Louisiana, New Orleans, LA 2006 – 2009

*Bachelor of Arts in Physics*

**PROFESSIONAL EXPERIENCE**

**Hinds Community College.** Raymond, MS 2013 - 2018

***District Senior Physics Instructor***

* Effectively taught Physical Science Survey I lecture and laboratory courses, Introduction to Astronomy lecture and laboratory courses, and General Physics I and II lecture and laboratory courses by flipping classroom
* Led a 4-person textbook selection team to select district textbooks for 5 courses
* Increased student retention in General Physics I by 85 percent (83 students) and in General Physics II by 80 percent (32 students) in 9 months
* Served as curriculum development representative for physics course curriculum updates and clarified physics articulation agreement between Hinds Community College and Jackson State University
* Recommended eight successful candidates to graduate/professional school

**Holmes Community College**, Ridgeland, MS 2016 - 2018

***Adjunct Physics Instructor***

* Designed, taught, and facilitated accessible Physical Science Survey I and Introduction to Astronomy combined lecture and laboratory courses using distance methodologies including gamification
* Developed and designed completely virtual laboratory assignments to meet State Board of Community College requirements
* Recommended four successful candidates to professional school

**SKILLS**

* American Sign Language (conversational)
* Russian (conversational)
* Project Management
* Crisis Leadership & Disaster Management
* Coding – Python, MATLAB, MATHCAD, R
* Management of cross-functional diverse teams
* Basic Financial Accounting
* Advanced Mathematics: Calculus, Linear Algebra, Differential Equations, Complex Analysis

**CERTIFICATIONS, AWARDS, & INTERESTS**

* Licenses and Certifications include Texas Engineer-In-Training, Advanced Certified Pharmacy Technician, and Certified Medical Administrative Assistant
* Volunteer work at Oakley Youth Development Center, Madison County Library System, and Two Mississippi Museums
* Professional Organization Memberships in IEEE, SPIE, American Physical Society, Materials Research Society
* Interests include information access and health equity, and I read one New York Times Bestseller and one peer-reviewed journal article outside my field each week