CURRENT ADDRESS 1010 N. Salisbury St. Apt. 29 West Lafayette, IN 47906 Jacob R. Gifford giffordjacob0@gmail.com (765)543-6380

OBJECTIVE

To obtain a technical laboratory position, furthering the research and quality assurance goals of my employer utilizing my skill and knowledge of chemical and biological protocols while further developing expertise with instrumentation and data analysis.

EDUCATION

Purdue University, West Lafayette, Indiana Chemistry (Conc. Biochemistry) American Chemical Society Bachelor of Science - 2020 GPA: 3.42

RELEVANT AND UNIQUE SKILLS

Instrumentation and Networking

- Performed a wide variety of experiments requiring the ability to use a multitude of laboratory techniques and technology including microscale multi-step synthesis, NMR, HPLC, GC, AFM, TEM, and SEM
- Networked with leading scientists throughout the Midwestern and Mid-Atlantic regions of the United States
- Established working relationships with scientists in different research environments, academic universities, private research companies and with federal research labs through the army
- Experience using Python, R, BASH, and SPSS statistical software

WORK AND LEADERSHIP EXPERIENCE

France A. Cordova Recreational Center

Supervisor/Challenge Facilitator

- Developed new employees' skills and taught effective on the job skills
- Persuaded patrons to undertake ventures that they would not normally be comfortable doing
- Lead groups through various teambuilding activities and facilitate teamwork to complete complex tasks
- Monitored and maintained a safe environment in high stakes and dangerous situations
- Instructed and encouraged patrons to develop their own skills and strengths in order to become better climbers and transition to exciting outdoor experiences

Thompson Lab

Undergraduate Researcher

- Performed multi-step organic synthesis of novel molecules for production and drug testing
- Synthesized cyclodextrin-threaded rotaxane polymers centered on various drugs for the treatment of Niemann Pick Type C, a debilitating disease that causes cellular cholesterol intake issues utilizing mechanochemistry
- Independently developed novel uses for elastin-like polypeptides (ELPs) with the goal of creating a new method for purifying the products of organic syntheses

Army Research Laboratory

Intern/Researcher

WMRD Aberdeen Proving Grounds, Maryland

- June 2019 August 2019
- Developed a deep understanding of complex nanoscale interactions, band gaps, van der Waals heterostructures, thermoelectric materials including the synthesis methods of various nanomaterials and composite structures
- Utilized a wide variety of analytical tools to characterize nanocomposites and collect and analyze data relevant to their thermoelectric performance
- Maintained a clear and concise record of experiments performed and articles referenced
- Authored a comprehensive summary of research performed throughout the summer and submitted it for internal publishing

Chopra Lab

Undergraduate Researcher

- Performed bioinformatic and cheminformatic analyses to predict molecular interactions
- Utilized analytical problem-solving and developed programming skills to address issues that arose in process
- Managed an individual research project investigating the interactions of FDA approved inhibitor-class drugs with the entire cataloged human proteome

West Lafayette, Indiana April 2018-Present

West-Lafayette, Indiana April 2018-January 2020

West Lafayette, Indiana November 2016-August 2017