# Michael Klapper

https://github.com/mklapp2 | https://www.linkedin.com/in/michael-klapper/

I am a highly motivated software engineer seeking new opportunities to solve challenging problems and continue learning new skills and technologies.

#### **Education**

Bachelor of Science - Computer Science
Western Governors University
Bachelor of Science - Chemical Engineering
University of Wisconsin-Madison

## Certifications

- SANS GIAC GFACT
- CompTIA Project+
- ITIL 4 Foundation

#### Skills

**Programming Languages, Tools, and Concepts – Used Frequently:** Python, PyCharm, Git, Kali Linux, VMWare Workstation, Data Structures, Algorithms, Object Oriented Programming (OOP)

**Programming Languages, Tools, and Concepts – Previous Experience:** Java, C++, C#, JavaScript, IntelliJ, Visual Studio, MySQL, Agile, Scrum, Kanban, Unix/Linux environments, SQL Server Management Studio (SSMS)

**Cybersecurity Tools – Used As Needed For Competitions:** Nmap, Ghidra, Wireshark, Aircrack, Hashcat, DirBuster, Bash, awk, hex editors, various Steganography tools

Other Tools: Excel, PowerPoint, MS Project, MS Visio, AutoCAD, various chemical engineering tools

# **Organizations**

- WGU Cybersecurity Club
  - o Competition: Ranking/Total Participants
  - o NCL 2021 Spring Individual Game: 222/4180
  - o NCL 2021 Fall Preseason: 1 / 6447
  - 2022 Rocky Mountain Cyber Summit CTF: 2/21
  - o CyberSEED 2022: 22/119
  - NCL 2022 Spring Practice Game: 27/6026
    - Created a parsing script to extract data from a binary stream of a custom file transfer protocol
  - NCL 2022 Spring Individual Game: 78/6026
    - Parsed email server log to identify suspicious user activity
  - NCL 2022 Spring Team Game: 11/978
  - o MIT BattleCode 2023: 122/436 <a href="https://github.com/team-remember-to-hydrate/battlecode23-team-remember-to-hydrate">https://github.com/team-remember-to-hydrate/battlecode23-team-remember-to-hydrate</a>
  - o CyberSEED 2023: 29/192
  - NCL 2023 Spring Individual Game: 51/6273

# **Work Experience**

**Software Engineer Intern** 

Jan. 2022 - May 2022

Skyward – Remote

- Contributed to an Agile workflow through daily standups, weekly retros, refinements, and peer reviews
- Added to production code written in C# using MVC design, running unit tests, and reacting accordingly to results
- Configured virtual SQL servers for testing with anonymized data using Microsoft SQL Server Management Studio
- Added index as needed to SQL tables to improve guery execution time
- Collaborated with other teams to clarify objectives and produce deliverables for cross-team projects

- Utilized GitHub for version control and as part of the code review process, handling merge conflicts as needed
- Analyzed project requirements and requested changes to achieve more realistic user values by reducing maximum text input size from 2GB to 4000 characters
- Developed changes in internal tools including Stakeholder Feedback board and Kanban board using JavaScript

# **Process Development Engineer**

Jan. 2017 - Oct. 2020

DariTech - Lynden, WA

- Wrote automation sequences including pseudocode for automation of industrial processes
- Implemented a system for tracking lab samples and results, greatly improving documentation capabilities
- Created standard operating procedures and instructional documentation to support project longevity
- Communicated results and recommendations to customers and internally at an executive level
- Developed a patented manure management system working through technology selection, supporting lab work, system design, component selection and acquisition, construction and assembly oversight, and pilot testing
- Provided leadership to the research and development endeavors of DariTech to maintain their technological edge in the dairy equipment industry
- Assessed customer and industry needs to determine best fit solutions, including conducting experiments and lab work to discover appropriate products for the customer's needs

# **Process Improvement Engineer**

Sept. 2014 – Nov. 2016

Didion Ethanol - Cambria, WI

- Regularly collaborated with top management to provide technical expertise in the evaluation of potential highcapital investments, demonstrating strong communication and collaboration abilities
- Designed and implemented a project of repurposing equipment for use in a pilot trial, which resulted in an increase of full-scale production during the pilot and after implementation
- Researched and procured the necessary equipment, oversaw the installation, and provided training for the startup operation of a new process
- Communicated and negotiated with vendors to procure equipment and services that best served the company
- Provided managers with regular project updates and necessary details (Gantt charts, high-level block flow diagrams, process descriptions, cost-benefit analysis) of allocation of company resources, including equipment, budget, and personnel time
- Demonstrated excellent problem-solving and analytical skills troubleshooting equipment to mitigate downtime
- Managed project budgets, timelines, and equipment for multiple projects while maintaining schedule flexibility
- Interfaced with R&D and production teams to successfully develop and implement new ideas
- Mentored and provided R&D direction for up to 4 concurrent engineer interns

## Coursework

- Developed Customer Relations Management system using Java, JavaFX, SQL, and SceneBuilder to create, update, and delete customers, appointments, and customer data in a relational database with a GUI interface.
- Developed a Produce Identification application which implemented image recognition machine learning using
  Jupyter Notebooks, Python, TensorFlow to train a deep learning model to identify images of a selection of fruits
  and vegetables.
- Developed class roster management application in C++ to allow adding, modifying, and removing students from assignment to different courses.
- Developed a package delivery route planning application in Python to find a suitable solution to a 'traveling salesman' style problem, handling complications such as multiple vehicles with different abilities (armored, refrigeration), packages with known wrong (soon to be updated) destinations, and variable package arrival times to the transit hub. Utilized Unit Tests and Test Driven Development.

#### **Interests**

Strategy board games, gardening, reading, hiking, sailing, video games, travel, and cybersecurity competitions