CALEB FEDERMAN

Email me: calebsfederman@gmail.com   **LinkedIn:** https://www.linkedin.com/in/calebfederman
Call me: +1 (518) 421-1474   **Address:**

SKILLS
Data Analysis: Python (Pandas, NumPy, TensorFlow, PyTorch, SciPy, scikit-learn), SQL, Google Cloud Platform, Tableau, Jupyter Notebooks, Web/Data Scraping (RegEx, Requests, BeautifulSoup)
Misc. Software Development: C, Java, MATLAB, Git, Linux, Docker, Agile methodologies

EDUCATION
University of Wisconsin-Madison | B.S. Computer Engineering | Madison, WI | Expected December 2023
- Double Major: Computer Engineering and Computer Sciences
- Relevant Coursework: Artificial Intelligence, Artificial Neural Networks, Big Data Systems, Discrete Mathematics, Algorithms, Theory and Methods of Mathematical Statistics, Software Engineering

ENGINEERING EXPERIENCE
Plug Power – Software Engineering Intern; Latham, NY   *June 2022 – August 2023*
- Developed the process for scraping and uploading data (Python, Excel) from old library files for upload to a new universal database, increasing yield from the electrical engineering team
- Reduced controls source code (C programming language) complexity by 77%, improving productivity of all developers through better readability and modularity
- Actively participated in weekly scrum meetings, utilizing Agile methodologies and effective communication to solve problems
- Extended to part-time following the conclusion of the summer internship program while continuing studies and subsequently was invited to participate in the intern program for another summer

PROJECTS
Multi-Language Alphabetical Classifier; Academic Project   *September 2023 – Present*
- Engineered a CNN in PyTorch to identify characters across a diverse set of languages
- Processed a dataset of 6,831 handwritten English characters, converting them to a uniform grayscale format and resizing them for compatibility with the neural network
- Achieved a 90.17% accuracy on the test set with the CNN model

DriveAide – Distracted Driving Monitoring Application; Academic Project   *September 2023 – Present*
- Developed an Android app (Java) utilizing computer vision to detect driving distractions
- Integrated 40 distinct models for real-time alerting and post-drive analysis
- Coordinated the project using a Jira board, adhering to a biweekly sprint timeline

OTHER EXPERIENCE
ChrisCross Foundation – Charity Walk Planning Committee; Madison, WI   *January 2023 – May 2023*
- Raised over $3,000 for suicide, drug abuse, and mental health awareness through the planning of a charity walk which amassed over 100 participants

University of Wisconsin-Madison, BMRS – IT Support Technician; Madison, WI   *July 2021 – May 2022*
- Operated a help desk for 90 workstations and 50 end-users
- Purchased computer equipment for researchers to conduct biomedical experiments
- Managed time effectively between work and study during the semester

Center for Disability Services – IT Support Intern; Albany, NY   *July 2020 – August 2020*
- Assessed and resolved issues regarding missing inventory via communication with end-users
- Conducted system deployment across many locations

University of Wisconsin-Madison – Intramural Sports Official; Madison, WI   *September 2019 – March 2020*
- Enforced the rules of intramural sports in order to maintain a fair and fun environment for all participants
- Determined resolutions to conflicts in fast-paced conditions with a calm demeanor