Michael T. Moen

St. Louis, MO \diamond moenmichaelo2@gmail.com \diamond (XXX) XXX-XXXX \diamond linkedin.com/in/mtmoen/

EDUCATION

M.S. in Applied Statistics, The University of Alabama, Tuscaloosa, AL - 3.67/4.00 GPA

May 2026

B.S. in Computer Science & Mathematics, The University of Alabama, Tuscaloosa, AL - 3.89/4.00 GPA

May 2026

EXPERIENCE

Research Computing Student Lead, The University of Alabama Libraries, Tuscaloosa, AL

January 2023 - Present

- · Provide software development and data analysis support, assist with code in Python, C++, R, Java, HTML, CSS, and more.
- · Publish 20+ tutorials on accessing and analyzing REST APIs using Python and R, managing and reviewing GitHub Pages site content.
- · Built a full-stack web application using a Python Flask backend and a JavaScript, HTML, and CSS frontend for retrieving CEO pay data.
- · Design and teach workshops covering programming, data analysis and visualization, and machine learning using Python and R.
- · Document team and project standards and workflows to assist with onboarding and future operations.

MLOps Engineer Intern, Veterans United Home Loans, Remote

May 2025 - Present

- · Reduced latency in a Python FastAPI microservice by decoupling it from a RabbitMQ, replacing it with database access via SQLAlchemy.
- · Created and maintained unit tests using pytest, ensuring code reliability and enhancing CI/CD pipelines in GitLab and GitHub.
- · Designed and implemented Prometheus monitoring endpoints in a microservice, using Grafana to visualize metrics.
- · Developed containerized applications with Docker, leveraging Windsurf and ChatGPT as AI coding assistants.

Web Developer Intern, Bowfin Tech, Remote

January 2025 - May 2025

- · Built a client's website using WordPress and Elementor, implementing responsive web design for mobile and desktop users.
- · Implemented user tracking by integrating Google Tag Manager and Google Analytics with Google Ads and Meta Pixel.

Cyber Software Engineer Intern, Northrop Grumman, San Antonio, TX

June 2024 - August 2024

- · Automated the installation and updating of applications on 20+ Windows workstations on an air-gapped network by writing an Ansible playbook and PowerShell script, saving roughly 90 hours of manual updates per month.
- · Drafted a white paper for a Docker infrastructure to securely process files using multiple containers, reducing data transfer costs.
- · Configured a persistent SMB mount with Kerberos authentication in Red Hat Enterprise Linux.
- · Gained experience with Agile practices by participating in scrum meetings, sprint planning, and sprint retrospectives.

Software Engineer Intern, National Geospatial-Intelligence Agency, St. Louis, MO

June 2023 - August 2023

- · Cleaned Jira backlog of 2400+ tickets using Python, eliminating 100+ duplicate items and creating visualizations of the data with matplotlib.
- · Redesigned a Confluence website, creating a more user-friendly design and adding the ability to search and view files in browser.
- · Automated an accounting procedure using Microsoft Excel, saving about 5 hours of manual work per month.

PROJECTS

Air Quality vs. Life Expectancy Analysis | R, Python (Pandas)

- · Analyzed U.S. county-level data to evaluate the relationship between air quality indicators and cause-specific mortality rates.
- · Joined and cleaned datasets from multiple sources using Python, performing exploratory data analysis and model diagnostics in R.
- · Built multiple linear regression models with variable selection and multicollinearity checks using R to identify key pollutants.

Personal Website | React, HTML, CSS, Bootstrap

mtmoen.com

· Designed a website using React, HTML, CSS, and Bootstrap to create a responsive, professional, and mobile-friendly interface.

SKILLS

Languages Python, C++, R, JavaScript, HTML, CSS, SQL, LaTeX

Frameworks FastAPI, scikit-learn, React, Flask, Bootstrap

Tools Git, GitHub, Linux, Jira, Confluence, WordPress, Microsoft Office