# SAMSON TADESSE

# CONTACT

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# EDUCATION

# SOUTHWEST MINNESOTA STATE UNIVERSITY

Computer Science and Data Science 2021 - present

# SKILLS

Programming Languages:

- Python
- C++
- javascript
- CSS3
- PHP

#### Frameworks and Libraries:

- React
- Bootstrap
- Django
- TensorFlow
- Scikit-Learn
- PySpark SQL
- jQuery
- Tailwind CSS
- Node.js

# Web Development:

- Full-Stack Development
- Front-End Development
- Back-End Development
- Responsive Web Design
- Content Management Systems (CMS)
- E-commerce Website Development
- SEO Optimization

### ABOUT ME

senior Computer Science and Data Science student at Southwest Minnesota State University with a solid foundation in full-stack development, machine learning, and cloud computing. With hands-on experience in Python, JavaScript, React, and cloud platforms like AWS and Azure, I've built scalable web applications and data-driven solutions. Proficient in Agile methodologies, Docker, Kubernetes, and CI/CD pipelines, I'm eager to bring my expertise in software architecture and DevOps practices to a dynamic engineering team.

### WORK EXPERIENCE

#### SYSTEM ENGINEER INTERN | SWBC

May 2022 - Aug 2022

- Assisted in the deployment and maintenance of enterprise-level systems, ensuring smooth operation across multiple departments.
- Collaborated with senior engineers to implement security protocols, improving the company's IT infrastructure resilience.
- Automated routine tasks using Python and shell scripting, which reduced system downtime and increased productivity.
- Provided technical support and troubleshooting for hardware and software issues, enhancing the efficiency of the IT helpdesk.
- Contributed to the optimization of network performance, resulting in a 15% increase in data transfer speeds across the organization.
- Participated in Agile team meetings and sprints, gaining handson experience in project management and team collaboration.

# WEB DEVELOPER (VOLUNTEER) | ENACTUS CLUB SMSU

May 2021 - July 2021

- Co-developed the official Enactus Club website, which significantly boosted online visibility and member engagement.
- Regularly updated website content and resolved technical issues, ensuring the platform's reliability and user accessibility.
- Integrated social media feeds and event calendars into the website, increasing user interaction by 20%.
- Collaborated with club members to create a visually appealing and user-friendly website design, improving overall user experience.
- Implemented SEO best practices, which increased website traffic by 30% within three months.

#### Machine Learning & Data Science:

- Machine Learning Model Development
- Data Preprocessing and Cleaning
- Regression Models
- · Classification Algorithms
- Data Analysis
- Data Visualization (Matplotlib, Seaborn)
- Model Evaluation (Accuracy, Precision, Recall)

#### Cloud Computing & DevOps:

- Cloud Platforms: AWS, Azure
- Docker
- Kubernetes
- CI/CD Pipelines
- Network Optimization
- System Deployment and Maintenance

#### Tools & Technologies:

- Git & Version Control
- Agile Methodologies
- Jenkins
- SQL Databases
- Shell Scripting
- Automation with Python
- Troubleshooting & Technical Support
- Secure Payment Gateways
- Real-time Analytics Tools

#### Soft Skills:

- Team Collaboration
- Project Management
- · Problem-Solving
- Technical Documentation
- Customer-Oriented Support
- User Experience (UI/UX) Testing
- Communication Skills

# CERTIFICATES

- >> AWS DevOps
- CCNA: Enterprise Networking, Security, and Automation

# PROJECTS

#### WEBSITE FOR LOCAL BUSINESS | MANBILUZ.COM

- Developed a responsive and modern website using HTML5, CSS3, Bootstrap, JavaScript, and PHP, which improved the business's online presence.
- Integrated a custom content management system (CMS) to allow the business owner to easily update and manage website content.
- Implemented secure contact forms and payment gateways, enhancing the site's functionality and user trust.
- Optimized the website for speed and performance, reducing load times by 40% and improving user retention.

#### SMSU\_RESTAURANT | TEAM PROJECT

- Led the back-end development of a restaurant management system using Django ensuring robust and scalable server-side functionality.
- Developed and managed the database schema, implemented RESTful APIs, and integrated user authentication and authorization features to secure the application.
- Collaborated with the front-end team to seamlessly connect the UI with back-end services, ensuring smooth data flow and functionality.
- Implemented core features such as online reservations, order processing, and menu management, enhancing the restaurant's operational efficiency.
- Conducted rigorous testing and debugging to ensure the backend services performed reliably under various conditions.

#### STOCK PRICE PREDICTION AND ANALYSIS

- Utilized machine learning techniques, including regression models, to accurately predict stock prices based on historical data.
- Preprocessed and analyzed large datasets, ensuring data quality and enhancing model accuracy.
- Implemented the project using Python libraries such as TensorFlow and Scikit-Learn, demonstrating a strong understanding of data science methodologies.
- Visualized prediction results with Matplotlib and Seaborn, making insights more accessible to stakeholders.
- Documented the project's findings and presented them in a clear, concise report, which received positive feedback from peers and instructors.

#### **BLOOD DONATION SAFETY ANALYSIS | TEAM PROJECT**

- Tackled the critical issue of determining blood donation safety for Hepatitis C patients using machine learning.
- Cleaned and preprocessed the HCV dataset from the UC Irvine ML Repository, handling missing values and feature engineering.
- Employed PySpark SQL for data exploration and applied classification algorithms to predict the safety of blood donations.
- Analyzed model performance using metrics like accuracy, precision, and recall, and iterated on the model to enhance results
- Concluded the project with a comprehensive analysis, summarizing the model's effectiveness and proposing improvements for real-world application.