Averine Sanduku

Portfolio: https://www.sandukuworks.ai/ | Github: https://github.com/averine1 | Email: averinesanduku15@gmail.com

EDUCATION

University of California, Berkeley | Master of Information and Data Science & AI | GPA: 3.6 | May 2025
Tuskegee University | B.S. Mechanical Engineering | GPA: 3.5 | December 2022

EXPERIENCE

Data Scientist/ Data Analyst Lead - Officer
US Navy | December 2022 – July 2025 (Honorably Discharged)

- Led cross-functional team of 50 personnel managing complex data analytics and logistics projects, utilizing Agile methodologies and stakeholder management to deliver continuous improvement initiatives.
- Developed and deployed predictive analytics models using Python, scikit-learn, and SQL to process daily health records through automated ETL pipelines, improving operational decision-making efficiency by 52%.
- Designed business intelligence dashboards using Tableau and Power BI for executive stakeholders, enabling real-time visibility into operational performance and unplanned losses.

Structural Analysis and Mechanical Design Engineer Intern
The Boeing Company | 3 rotations 2020 - 2022

- Analyzed 200+ Service Discrepancy Reports on 787 aircraft using Python for trend detection and root cause analysis; built automated tooling that improved installation accuracy by 20%
- Led antenna switch redesign from prototype through production, conducting structural and thermal analysis that improved signal quality by 20% and reduced design iteration cycles by 25%
- Collaborated cross-functionally with hardware and systems engineering teams in Agile environment across three rotations spanning commercial and defense divisions

Material Science Researcher
Nucor Steel Co. | August 2020 – May 2021

- Conducted laboratory experiments on steel manufacturing processes, applying statistical modeling and root cause analysis to identify variance patterns that improved production efficiency by 18%
- Applied statistical process control and quantitative failure analysis to optimize material reliability and reduce defect rates.
- Synthesized experimental data into technical reports driving process improvement recommendations.

TECHNICAL PROJECTS

Co-Founder/Lead Developer
VitalStory: Healthcare AI | August 2024 – September 2025

- Designed and deployed GenAI-powered healthcare applications using fine-tuned Med42 LLM on AWS SageMaker with RAG-based architecture for AI-guided-patient-provider interactions.
- Developed LLM prompt engineering strategies and benchmarked models to optimize clinical question generation.
- Built evaluation pipeline using Python to assess performance against physician validated gold-standard datasets; deployed production infrastructure via AWS Lambda and API Gateway.

Backend Developer
StayInTouch | October 2025 - Present

- Building full-stack PWA with React, TypeScript, and Supabase to help professionals maintain meaningful connections
- Designing database schema, authentication flows, and RESTful API architecture; collaborating with UI/UX co-founder on product direction
- Implementing automated reminder system and contact scoring logic to surface relationship insights and prompt timely follow-ups

TECHNICAL SKILLS

Methodologies: Lean Six Sigma, Root Cause Analysis, Statistical Process Control, Process Optimization, Quality Management
Frameworks & Tools: React, Node.js, Supabase, PostgreSQL, Git, Docker, Jupyter, NumPy, Pandas, Scikit-learn
Cloud & Infrastructure: AWS, Linux, model development, API development, ETL Pipelines
Languages: Python, SQL, JavaScript, Bash

CERTIFICATIONS

Lean Six Sigma Yellow Belt | October 2025
Certified Scrum Master | November 2025
AWS Certified Cloud Practitioner | December 2025