

Mohammed Njie

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Education

University of Nebraska Omaha (B.S. CS & AI, 3.73 GPA; expected May 2027, planned May 2028)

Aug 2024 - May 2027

Experience

First National Bank of Omaha, Software Engineering Intern

May 2026 - Present

- Built and debugged production Spring Boot and React services for commercial card workflows in a large financial services codebase
- Used GitLab CI/CD and Dynatrace to support deployability, observability, and incident investigation across internal systems
- Contributed to a repository-aware AI knowledge base that improves Copilot retrieval context for engineering teams

Chief Technology Officer - Blueprints of Pangaea Omaha Chapter

Dec 2025 - Present

- Architected a full-stack inventory system for medical supply logistics, replacing a Google Sheets workflow with structured data models
- Defined stack, authentication model, and core inventory workflows for searchable supplies, expiration tracking, lot metadata, and role-based access
- Translated operator constraints into implementation decisions across database schema, UI flows, and deployment tooling

University of Nebraska Omaha, Lead IT Consultant (Part Time)

Jan 2025 - Present

- Led technical support workflows for classrooms, faculty, and student workers across campus systems
- Created training material that standardizes troubleshooting paths for new student employees

University of Nebraska Omaha, Python Grader (Part Time)

Jan 2025 - Present

- Evaluated Python assignments for correctness, style, edge cases, and rubric alignment under weekly deadlines

Research

University of Bern, Research Software Engineer

June 2026 - Present

- Building a generative UI platform that maps arbitrary application state into dynamic researcher-configurable interfaces

UNO, Purpose-Prompting Interventions to Counter Autopilot Social Media Engagement (Research Grant)

June 2026 - Present

- Building an anti-doomscrolling study app with simulated feed interactions for measuring attention, intent, and intervention effects
- Implementing purpose-prompting intervention flows that let researchers compare behavior before and after reflective prompts

Los Alamos National Laboratory x UNO, Research Software Engineer

June 2025 - Aug 2025

- Built a Flask/PostgreSQL review application for nuclear waste barrel damage verification in a Department of Energy lab setting
- Designed routing logic, relational data models, and front-end review queues for AI-flagged barrel images
- Researched YOLO-style object detection approaches for automating damage detection from image data

University of Nebraska Omaha, Cybersecurity Research Intern (Part Time)

June 2022 - July 2022

- Investigated web security and internet safety risks on K-6 student-facing websites and presented findings to shareholders

Projects

MiiTuber (miituber.com)

- Built a cross-platform Tauri desktop app using Rust, TypeScript, and Three.js to render Nintendo Mii avatars as real-time 3D VTuber characters
- Implemented webcam-driven face tracking, expression mapping, audio-reactive lip sync, and OBS-ready output without motion-capture hardware
- Packaged avatar rendering, calibration, and creator controls into a low-latency desktop workflow for streamers

PEAK (BeaverHacks 2026)

June 2026

- Built a React/Vite/TypeScript app with a Node/Express backend that generates personalized learning routes as interactive mountain waypoints
- Implemented Anthropic-powered route generation, submission evaluation, shared TypeScript contracts, Zod validation, and file-backed route caching
- Created a [YouTube video](#) presenting the BeaverHacks prototype and technical direction

FarmAgent

July 2026

- Built a TypeScript farm-assistant agent that orchestrates weather, crop/soil lookup, and pest/disease image-classification tools through explicit tool calls
- Trained and served a PyTorch PlantVillage disease classifier behind FastAPI, integrating model inference into a mobile-friendly Next.js PWA

Skills

Languages: Python, TypeScript, JavaScript, Java, Go, Rust, SQL, HTML/CSS

ML/AI: Computer vision, object detection, YOLO

Frameworks: React, Spring Boot, Flask, Tauri, Three.js, TailwindCSS

Systems: PostgreSQL, Supabase, SQLite, Docker, Git/GitHub, GitLab CI/CD, Dynatrace, OBS integration

Awards, Certs and Orgs: Walter Scott Jr. Scott Scholar, ColorStack, MIT Innovation Ignited Fellow, [NVIDIA Certified Associate: Generative AI and LLMs](#)