CONNOR MCNEELY

Full-Stack Developer | AI Developer | Machine Learning Engineer

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SUMMARY

Developer with engineering background building full-stack web applications and AI-powered systems. Experience with React, Next.js, Node.js, and Python. Trained in machine learning, deep learning, and LLM application development including RAG systems and AI agents. Background in data analysis, automation, and predictive modeling from 5+ years in engineering roles.

TECHNICAL SKILLS

- **Languages:** Python, JavaScript, TypeScript, SQL, MATLAB
- **Frontend:** React, Next.js, HTML5, CSS3, Tailwind CSS, Framer Motion
- **Backend:** Node.js, Express, FastAPI, REST APIs
- **Databases:** MongoDB, PostgreSQL, Pinecone, Chroma, FAISS
- **AI/ML:** TensorFlow, PyTorch, Scikit-learn, LangChain, LangGraph, OpenAI API, RAG, Prompt Engineering
- **Cloud/DevOps:** AWS (SageMaker, Bedrock, Lambda, S3), Vercel, Git, GitHub, Cloudflare

PROJECTS

Inner Animals AI Dashboard | *Next.js, FastAPI, PyTorch, LangChain, Pinecone*
- Built AI/ML platform with RAG builder, ML model training studio, and NLP analytics dashboard
- Implemented RAG system using LangChain and Pinecone for document retrieval and question answering
- Integrated scikit-learn and XGBoost for custom ML model training workflows

RAG Q&A System | *Python, LangChain, OpenAI API, Pinecone, Next.js*
- Developed Retrieval-Augmented Generation system for technical documentation Q&A
- Implemented document chunking, embedding generation, and vector similarity search
- Built FastAPI backend with Next.js frontend deployed on Vercel

CAD Autonomous Engine | *Python, AI/ML, FastAPI, React*
- Developed AI-powered CAD design assistant for mechanical engineering workflows
- Integrated LLM-powered design suggestions with parametric constraints

AI Health & Fitness Coach | *React, FastAPI, OpenAI API, Python*
- Built fitness coaching application with personalized workout and nutrition recommendations
- Developed prompt engineering templates for context-aware AI responses

Southern Pets Animal Rescue | *React, Node.js, MongoDB, Express*
- Built full-stack MERN application with pet listings, adoption applications, and admin dashboard
- Designed REST API endpoints and MongoDB schemas with Mongoose

Leadership Legacy | *Next.js 15, TypeScript, Tailwind CSS, Framer Motion*
- Architected portfolio platform with server-side rendering and responsive design
- Implemented animations and mobile-first styling deployed on Vercel

EXPERIENCE

Lead Mechanical Design Engineer | Bayou Pumps & Equipment | *New Iberia, LA*
December 2023 – Present

- Developed Python and MATLAB scripts for data analysis and simulation automation
- Built data visualization tools for FEA/CFD simulation results
- Applied statistical analysis for equipment performance prediction

Automation Engineer | John Deere Reman | *Springfield, MO*
January 2023 – July 2023

- Implemented Cognex machine vision systems for quality inspection
- Designed SQL database schemas for production tracking and sensor analytics
- Developed predictive maintenance solutions using sensor data analysis

Manufacturing Tech Support Engineer | Pfizer | *McPherson, KS*
September 2021 – September 2022

- Built IoT monitoring dashboards for vaccine manufacturing parameters
- Developed image processing solutions for equipment inspection
- Supported COVID-19 vaccine production through process optimization

EDUCATION

Bachelor of Science in Mechanical Engineering | Louisiana Tech University | Ruston, LA

TRAINING & CERTIFICATIONS

- Machine Learning & Data Science: Scikit-learn, Neural Networks, TensorFlow
- Deep Learning: CNNs, Transfer Learning, PyTorch, Image Classification
- LangChain, LangGraph & LangSmith: Chains, Agents, RAG Systems
- RAG Bootcamp: Vector Databases, Embeddings, RAGAS Evaluation
- AWS SageMaker & Bedrock: Model Training, Fine-Tuning, AI Agents
- Agentic AI: CrewAI, LangGraph, OpenAI Agents SDK, MCP