Maxim Meadow

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Seeking Summer 2027 AI/Software Engineering Internships

OVERVIEW

MSU computer science master's student with experience building enterprise AI systems, production data pipelines, and custom ML models. Proven track record designing and deploying scalable, high-impact applications across document intelligence, multi-agent workflows, developer platforms, and applied audio machine learning.

EDUCATION

Michigan State University, College of Engineering - East Lansing, MI
Master of Science, Computer Science Expected May 2028
Bachelor of Science, Computer Science, Minor in Business Major GPA: 3.7
Dual enrolled via MSU BS/MS Program

EXPERIENCE

Corewell Health - Grand Rapids, MI
Generative AI Intern, Enterprise Automation & AI Team May 2026 - August 2026

- **Corewell Contract Intelligence** - Designed and shipped a deterministic scoring engine that ranked risk and opportunity signals across a $509M, 1,000+ contract portfolio and $8.5B in supplier spend then exposed it through a conversational AI agent that let sourcing and category-management teams collaboratively manage contracts and tail spend through natural language, surfacing $135M in tail spend and $345M in savings
- **NEXA -** Built the AI reasoning core of an automated document-intelligence pipeline that extracts structured data from 100+ page insurance payer policies, eliminating manual review across Revenue Cycle operations, with modeled savings scaling to $143M annually as full integration rolls out
- **Copilot Learning Platform -** Designed and built an AI agent harness that autonomously generates personalized Microsoft Copilot training content on demand for any of Corewell Health's 65,000+ employees, tailored to the requester's role and department
- Engineered the platform's full stack: a React/TypeScript app with a 25-type dynamic content-rendering engine, a schema-validated data layer, and the RAG + video-grounding architecture that grounds every generated lesson in verified internal content

Three Pillars LLC - Remote
Software Engineering Intern January 2026 - Present

- Proposed and built a Chrome extension that replaced a manual copy-paste workflow with one-click capture into an AI valuation pipeline, featuring RAG chat, GPT-4o visual snipping, and a multi-embedding scheme that bypasses OpenAI's 8,192-token embedding limit while preserving full-chunk retrieval
- Grew a proprietary financial comparables library from 482 to 986 companies (47,000 financial rows) via EDGAR XBRL ingestion and LLM gap-filling, backed by a 13-check quality gate that purged 990+ corrupted records; then cut core query latency from 11.1 to 3.8 seconds
- Rebuilt the production document-extraction pipeline behind the entire RAG system as sole architect, combining deterministic table detection with two-pass Gemini extraction to handle complex financial tables, cutting per-document cost about 95% and replacing a paid vendor while expanding file types from 2 to 13

Michigan State University - East Lansing, MI
CSE 498 (Capstone Course) Teaching Assistant August 2026 - Present

- Serving as one of three TAs for MSU's senior capstone course, personally advising 10 of the 30 industry-sponsored project teams including Amazon, Magna, Kohl's, Kohler Co, NetJets, and more
- Run weekly one-on-one check-ins with each assigned team to track progress and provide technical guidance, review detailed project proposals covering system architecture and scope, and assess status updates and alpha/beta milestone presentations throughout the course

Software Developer (for Kohler Co) January 2026 - May 2026

- Led a team building an enterprise AI orchestration platform that reinvents supply chain procurement by integrating a multi-agent chat system built on a custom Copilot Studio harness and Azure infrastructure
- Developed a 5-pass reasoning pipeline to resolve multi-departmental conflicts utilizing collaborative AI agents to evaluate supply chain trade-offs to deliver precise Economic Order Quantity recommendations

PROJECTS

Ambio - Architecture Platform for AI Coding Agents
Sole Developer (Go, TypeScript, Electron, React Flow, SQLite, MCP) July 2026 - Present

- Designed and built an open-source desktop platform where developers and AI coding agents jointly author software architecture, translate visual plans into structured agent work orders, and continuously validate implemented code changes against intended system designs
- Built an Electron/React Flow app backed by a Go daemon, per-project SQLite databases, and WebSocket APIs, keeping interactive architecture maps synchronized with live code edits
- Developed source analysis across nine programming languages using tree-sitter, with deeper dependency and data-flow analysis for TypeScript/JavaScript, Python, and Go; combined dependency graphs, TF-IDF similarity, and Git co-change history to cluster files into nested systems
- Implemented persistent MCP work orders using transactional snapshots, claim leases, and optimistic concurrency checks; verified completed changes against source-derived architecture
- Built infrastructure detection against an 87-service registry, extracting dependencies from source code and configuration files to map databases, queues, external APIs, and hosting alongside application architecture

RCC-Drive - Spatial Grounding for Autonomous Driving
Project Contributor (Python, nuScenes, Shapely, Vision-Language Models) January 2026 - May 2026

- Built a spatial extraction pipeline computing 12,834 RCC-8 relations across 404 nuScenes keyframes, encoding pedestrian, vehicle, and crosswalk interactions as structured facts for VLM grounding
- Implemented bird's-eye-view geometry classification across eight spatial relations, with unit tests covering boundary-contact and containment cases
- Curated 59 safety-critical scenes using camera-calibration-derived visibility filtering to support controlled comparisons of image-only and spatially grounded VLM reasoning

Phonauto - Audio ML for Accessible Music Production
Advanced Project Team Lead September 2025 - December 2025

- Led a team of 3 peers in building an industry leading accessibility tool for music production winning Best Overall and People's Choice against 7 other student teams judged by professors and industry professionals
- Lead/sole developer of 2 audio transcription ML models: hum2melody (CRNN) and beatbox2drums (CNN), achieving 98.46% accuracy on MIR-QBSH and 99.39% accuracy on AVP/BaDumTss datasets outperforming SOTA industry baselines (~93-95%) while maintaining a sub-2x real time inference speed on CPU

SKILLS

Programming Languages:	Python, TypeScript, JavaScript, C++, SQL, Go, Java, HTML/CSS
Machine Learning & AI:	PyTorch, TensorFlow, RAG Systems, Multi-Agent Orchestration, LLMs/VLMs
Enterprise & Cloud Platforms:	Microsoft Azure, Microsoft Power Platform, Docker, PostgreSQL, Git/GitHub, Linux/WSL
Frameworks & Tools:	React, Next.js, Node.js/Express, FastAPI, Microsoft Copilot Studio
Other:	Data Pipeline Architecture, Model Optimization, Microservices, Sensor Fusion

INVOLVEMENT

Boy Scouts of America - Cascade, MI
Eagle Scout January 2023

- Awarded 43 merit badges (most in troop history) helping develop a multitude of life skills and contributing 100+ hours of service to various communities in the Grand Rapids area
- Gained leadership experience through positions such as Patrol Leader, Den Chief, Medic, and Troop Guide

Sigma Tau Gamma Fraternity - East Lansing, MI
Vice President (and formerly Director of Member Engagement) March 2024 - March 2026

- Manage workload and efficiency of the Executive Board, directly contributing to finance and operations, member engagement, community engagement, and education and wellness