

Julian Wemmie

New York, NY • julianwemmie@gmail.com • (319) 383-3040 • linkedin.com/in/julian-wemmie
github.com/julianwemmie

Experience

Software Engineer — Internal AI Solutions

John Deere & Company

Moline, IL

July 2025 – Jan 2026

- Built Python/FastAPI service using GPT-5 to parse inconsistent factory specification spreadsheets (variable formats across hundreds of factories) into structured product data for a revenue-critical configuration platform serving ~500 users globally (~\$625K/year estimated labor savings across 50 analysts).
- Led development of LLM-based requirements extractor for government bid packages (50+ pages), using document chunking with per-page metadata and deduplication to produce citation-backed outputs. Cut analyst prep from ~2h to ~15min, reducing turnaround by ~3 days.
- Built GitHub Actions CI pipeline running promptfoo accuracy evals across ~10 MCP services on deployment; created reusable template adopted by multiple teams.

Software Engineer — MOCI Product Information

John Deere & Company

Moline, IL

Jan 2025 – June 2025

- Untangled micro-frontend dependency graph (symlinks, conflicting React/Redux versions, Webpack config) to enable local development — cut feedback loop from ~40min (deploy-to-QA) to ~5min, adopted by all 10 engineers.
- Rewrote 4-5 major pages from Angular to React for a business-critical product configuration platform managing hundreds of thousands of parts across global factories. Highest Jira velocity on 10-person team.

Software Engineering Intern — Digital Payments

John Deere & Company

Moline, IL

May 2024 – Aug 2024

- Built AWS serverless dashboard (Lambda, CloudFront, Route 53) aggregating payment volume (millions/month) by product and CI/CD pipeline health with build failure alerts. Owned infrastructure and deployment end-to-end.

Software Engineer Intern (Part-Time)

ENGIE North America

Iowa City, IA

Nov 2022 – Jan 2025

- Built full-stack fuel delivery tracking app (React, ASP.NET, SQL Server) replacing Excel/email workflows with near-real-time cost monitoring for power plant operations — previously limited to quarterly breakdowns.
- Won 1st place at HackUIowa 2022 with real-time emissions dashboard (Streamlit, Pandas, Plotly) integrating fuel usage, electricity, and grid emissions data; polished into production tool at ENGIE.

Education

University of Iowa

BA in Computer Science (with Honors, with Distinction), Minor in Philosophy

2020 – 2024

- GPA: 3.75, National Merit Scholar

Projects

Wardrobe Tracker with ML-Based Clothing Segmentation

ClotherAI

Dec 2025

- Built clothing analytics app using SegFormer B3 to segment apparel from selfie photos and match items to wardrobe via Jina AI vector embeddings with SQLite-vec similarity search. React/TypeScript frontend (Vite), Python/FastAPI backend.

Infinite Canvas for 150K+ Art Images

Art Institute Explorer

Nov 2025

- Built frontend-only infinite scrolling canvas for the Chicago Art Institute's 150,000+ image collection. Wrote custom pseudo-deterministic masonry layout algorithm that computes layouts without knowing image dimensions beforehand.

Technical Skills

- **Languages:** TypeScript/JavaScript, Python, Java, C#, SQL
- **Frontend:** React, Redux, Zustand, Material UI, Bootstrap, Webpack
- **Backend & AI:** FastAPI, FastMCP, OpenAI API, promptfoo, ASP.NET, Spring Boot, Node.js/Express
- **Infrastructure:** AWS (Lambda, CloudFront, Route 53), Docker, Kubernetes, GitHub Actions, Jenkins