JARED KREKELER

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Education

University of Cincinnati **Graduating Fall 2026**
B.S. Computer Science, Minor in Statistics *Cincinnati, OH*
Coursework: Machine Learning, Deep Learning, Artificial Intelligence, Data Science, Data Structures, Regression Analysis, Linear Algebra

Technical Skills

Languages: Python, C++, SQL, R, JMP, JavaScript, HTML/CSS
ML & AI: PyTorch, TensorFlow, XGBoost, OpenCV, Gymnasium, Stable-Baselines3, LLM agents, prompt engineering, RAG
Data & Cloud: AWS, Microsoft Azure, Databricks, PowerBI, Docker, Git, HEEDS, React, Flask

Experience

GE Aerospace **Dec 2025 – Present**
Applied AI Engineer Intern *Cincinnati, OH*

- Designed, built, and own end-to-end a production **Metrology AI Toolkit**, a knowledge-base-backed AI assistant over engineering drawings and inspection instructions, that **cut CMM rework lead time by 50%**; deployed to the internal reusable-agent library.
- Delivered agentic **CMM automation** (internal MCP server + HyperMesh mesh-morphing on HPC, parameterized across defect types) behind a team effort that **compressed ∼6 months of work into 5 days** and saved hundreds of labor hours — earning a Corporate Impact Award.
- Shipped **Process Pulse**, a statistical-process-control analytics feature, into GE's internal metrology AI assistant; delivered to production and rolled out to engineers for live use.
- Developed and maintain **QC-Calcite**, a self-owned production quality-control tool serving **200+ internal users** and running error-free in production (Sentry-monitored).
- Drove Claude Code adoption across the engineering org — **onboarding 30+ engineers** — presented on AI-in-metrology to leadership, led a live customer Q&A, and mentored interns.

P&G Digital Accelerator **Aug 2025 – Dec 2025**
Data Science Intern *Cincinnati, OH*

- Automated modeling-and-simulation workflows by integrating **HEEDS with JMP**, cutting manual setup and design-space exploration by **50%**.
- Engineered a **computer-vision pipeline** converting production-line footage into inputs for a **surrogate neural network** in Plant Simulation, **speeding KPI prediction 30%** and reducing downtime **15%**.
- Developed **AI-agent workflows** that streamlined repetitive simulations — **saving ∼10 hrs/week** and lifting throughput **18%** — while simplifying KPIs for business stakeholders.

TQL **Jan 2025 – Aug 2025**
Data Science & Analytics Intern *Cincinnati, OH*

- Fine-tuned a **production XGBoost pricing model**, improving real-time rate-recommendation accuracy by **8%** — a core input brokers use to quote loads.
- Migrated legacy data workflows to **Databricks on Azure** for scalable cloud analytics.
- Built a **PowerBI dashboard** surfacing negative-revenue brokers, **actively used by Sales VPs** to guide coaching and performance strategy.

Projects

DraftVision — NFL Draft Prediction Platform (Senior Design) *Python, React, Flask, XGBoost, CatBoost, Docker*

- Designed and deployed (Docker on Fly.io) a full-stack ML web app predicting NFL draft success for **9,000+ college and high-school prospects** via a **3-model ensemble** (calibrated XGBoost + CatBoost) over 16 engineered features and live ESPN/CFBD API data, reaching **∼73% held-out accuracy**.
- Added a ranked leaderboard with an offline cache pipeline (**sub-100ms** loads), fuzzy name resolution, and cosine-similarity player comps; React + Auth0 SPA served from Flask.

Deep Reinforcement Learning Football Bot *Python, PyTorch, Gymnasium*

- Trained a Deep Q-Network on real NFL play-call data to optimize drive-by-drive strategy in a **custom Gymnasium environment** with stateful transitions, scoring logic, and animated drive visualizations.

Awards & Activities

3× GE Aerospace Corporate Impact Award (CMM Automation, Project Leadership, CMM Hackathon) | **AWS Certified AI Practitioner**, **AWS Certified Cloud Practitioner** | Google Advanced Data Analytics Certificate | ML Specialization | AI Society | YouTube football-analytics creator (15,000+ views)