

# MATTHEW SCOTT

AI/ML Engineer | Healthcare Technology Specialist

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## PROFESSIONAL SUMMARY

Senior AI/ML Engineer with 10+ years at Humana, specializing in healthcare technology innovation and compliance automation. Proven track record of building production ML systems that deliver measurable business impact through process automation and intelligent decision support. Experienced in Python development, LLM orchestration, and enterprise-scale deployments.

## TECHNICAL SKILLS

<b>Languages:</b>	Python (Expert), SQL, JavaScript, Shell Scripting
<b>AI/ML:</b>	LLM Integration, NLP, Predictive Analytics, Model Orchestration
<b>Frameworks:</b>	PyTorch, TensorFlow, Scikit-learn, HuggingFace, LangChain
<b>Databases:</b>	PostgreSQL, MongoDB, SQLite, Vector Databases
<b>Cloud/DevOps:</b>	AWS, Docker, Git, CI/CD, Linux Administration
<b>Healthcare:</b>	CMS Compliance, Medicare Systems, HIPAA, Risk Management

## PROFESSIONAL EXPERIENCE

### Senior Risk Management Professional II - AI/ML Innovation Lead

Humana Inc. | Louisville, KY | October 2022 – Present

- Architected Python ML frameworks delivering \$1.2M in annual savings through process automation
- Led development of AI-driven compliance system maintaining 100% accuracy across Medicare regulations
- Built LLM orchestration system (Mirador) coordinating 7 specialized models for complex workflows
- Developed predictive analytics models improving risk detection by 20% using ensemble methods
- Managed cross-functional AI initiatives including E-Commerce Acceleration and Data Modernization
- Created automated testing framework reducing manual review time by 35%

### Risk Management Professional II - Automation Engineering Lead

Humana Inc. | Louisville, KY | September 2017 – October 2022

- Built automated testing framework processing 1,000+ deployments with zero critical defects
- Implemented ML-based compliance monitoring for 200+ Medicare pages annually
- Integrated AI/ML pipelines into CI/CD workflows for continuous optimization
- Mentored team of 12 engineers on Python automation and machine learning best practices
- Developed enterprise-scale production monitoring systems for complex Python applications

### Co-Founder & Technical Lead

Mightily | Remote | 2014 – 2017 (4 years)

- Built and scaled technical infrastructure for digital creative agency
- Developed custom automation tools improving workflow efficiency by 40%
- Led technical strategy and implementation for client projects
- Managed full-stack development using modern JavaScript frameworks

## KEY PROJECTS & INNOVATIONS

- **Mirador AI System:** Distributed ML architecture orchestrating 7 specialized LLMs for enterprise decision-making
- **Medicare Compliance Platform:** Automated system maintaining 100% accuracy across regulatory requirements
- **FinanceForge:** Personal finance optimization system with predictive analytics and anomaly detection
- **FretForge:** ML-powered guitar learning platform with real-time audio analysis
- **Risk Detection Framework:** Production system improving risk identification by 20% using ensemble methods

## EDUCATION

### Computer Science & Software Engineering

Self-Directed Learning | 2013 – Present

- Focus: Machine Learning, Distributed Systems, Software Architecture
- Key Coursework: Stanford CS231n (Computer Vision), Fast.ai Deep Learning, MIT 6.824 (Distributed Systems)
- Continuous Learning: 500+ hours annually in AI/ML advancement

## CERTIFICATIONS & PROFESSIONAL DEVELOPMENT

- AWS Certified Cloud Practitioner (2022)
- Python Institute PCEP – Certified Entry-Level Python Programmer
- Healthcare Compliance Certification - CMS Standards (Humana Internal, 2020)
- Active GitHub contributor with 100+ public repositories