

Chris Turner

Senior Manager, Generative AI Engineering

PROFESSIONAL SUMMARY

Former professional baseball player turned AI and cybersecurity leader with over 15 years of experience delivering enterprise-scale AI/ML, Generative AI, and advanced analytics solutions. Proven Solutions Architect specializing in AI engineering, Retrieval-Augmented Generation (RAG), LLM development, neural and semantic search, and MLOps automation. Recognized Amazon OpenSearch Subject Matter Expert (SME) known for integrating AI-driven approaches into cybersecurity, threat intelligence, and large-scale analytics. Hands-on with Python, NLP, and prompt engineering, with deep experience implementing MCP-style workflow integrations that enable LLM prompts to query internal policy and knowledge bases prior to generation. Designed and deployed Redis-backed vector memory systems with hybrid retrieval for compliant, workflow-aware outputs. Accomplished technical content creator, public speaker, and mentor focused on performance, reliability, and building scalable AI platforms that bridge the gap between data science, cybersecurity, and applied AI engineering.

EXPERIENCE

Senior Manager, Generative AI Engineering (Python) PwC

Oct 2025 - Present

Lead enterprise-scale initiatives focused on Generative AI systems, Machine Learning engineering, and data platform modernization within PwC's Cloud, Engineering, Data & AI practice. Drive architecture, automation, and production deployment of AI solutions that power insight generation across complex client environments.

- **AI Systems Architecture:** Design and deploy LLM-driven ecosystems leveraging LangChain, Bedrock, and OpenSearch for Retrieval-Augmented Generation (RAG), multimodal understanding, and contextual search.
- **Data Engineering & Integration:** Build cloud-agnostic pipelines across AWS, Azure, and GCP using Glue, Data Factory, and Dataflow to unify structured / unstructured data and enable large-scale embedding generation.
- **MLOps & Automation:** Implement infrastructure-as-code (Terraform, CloudFormation) and CI/CD pipelines to deliver reproducible, containerized GenAI services with FastAPI, Docker, and EKS.
- **Prompt & Agentic Workflows:** Develop multi-agent orchestration frameworks for reasoning, retrieval, and tool-calling; optimize prompt design and evaluation to improve accuracy, latency, and model trust.
- **LLM Observability & Governance:** Instrument token-level telemetry, retrieval metrics, and policy filters to ensure model transparency and reliability in production.
- **Data & Model Optimization:** Apply vector search, hybrid retrieval, and async streaming to improve recall and reduce inference cost; experiment with fine-tuning and model-routing strategies for domain adaptation.
- **Leadership & Enablement:** Mentor cross-functional teams in RAG architecture, embedding pipelines, and agentic design; champion engineering standards and open-source contribution across PwC's AI practice.
- **Key Impact:** Elevated PwC's Generative AI delivery capability—integrating data engineering, MLOps, and model observability into a unified framework for secure, scalable, and explainable AI systems across industries.

AI/ML & Data Analytics Solution Architect Amazon Web Services (AWS) • GLOBAL

Feb 2022 - Oct 2025

Integrated AI and data engineering expertise to design streamlined ETL pipelines, deploy robust ML models using AWS SageMaker and Bedrock for fraud detection, predictive analytics, and advanced insights. Led AI-driven cybersecurity projects and managed high-performing teams executing strategic Splunk-to-OpenSearch migrations for major enterprises.

- Integrated AI and data engineering expertise to design streamlined ETL pipelines, deploy robust ML models using AWS SageMaker and Bedrock for fraud detection, predictive analytics, and advanced insights.
- Leveraged AWS vector databases for intuitive, context-aware information retrieval, significantly enhancing search capabilities in generative AI applications.

- Led AI-driven cybersecurity projects integrating Incident Response, SIEM, Detection Engineering, Vulnerability Management, and Threat Hunting; ensured compliance with NIST, MITRE ATT&CK, and CIS Controls, strengthening risk management.
- Directed the Amazon OpenSearch Global Cyber Initiative, collaborating globally with integrators to deliver AWS-native cybersecurity solutions, reinforcing cloud security.
- Managed high-performing teams (L5–L7) executing strategic Splunk-to-OpenSearch migrations for major enterprises (Western Union, Citibank, Adobe, Yahoo, Capital One, Experian), optimizing cybersecurity analytics, operational insights, and observability.
- Enhanced OpenSearch's competitive positioning against Google Chronicle and Microsoft Sentinel, recognized as AWS Subject Matter Expert (SME); championed feature roadmap for analytics, cybersecurity, and AI/ML services, driving Pipe Delimited Processing Language (PPL) productionalization.
- Designed and delivered sophisticated ML Proof of Concepts (POCs), enabling visualization, informed decision-making, and accelerating client adoption of advanced AWS AI solutions.
- Engaged in high-impact collaborations with global clients and partners including Capital One, Zscaler, American Express, Adobe, McKinsey, Peloton, Cisco, UMG, Redpanda, and Experian, implementing tailored solutions for growth and efficiency.

Mgr. Cyber Analytics & Solutions Development @ Yahoo |
Toyota | Dept. Homeland Security
Booz Allen Hamilton

Jan 2019 - Feb 2022

Managed and matured cybersecurity architecture and data engineering for Booz Allen's Commercial Cyber Fusion Center (CFC), leading enterprise-scale Splunk deployments (AWS/on-prem), integrating CrowdStrike, and developing advanced analytics, dashboards, security essentials, and automated workflows for threat detection, rapid response, incident management, and vulnerability assessments.

- Managed and matured cybersecurity architecture and data engineering for Booz Allen's Commercial Cyber Fusion Center (CFC), leading enterprise-scale Splunk deployments (AWS/on-prem), integrating CrowdStrike, and developing advanced analytics, dashboards, security essentials, and automated workflows for threat detection, rapid response, incident management, and vulnerability assessments.
- Engineered AWS-based AI/ML-driven cyber intelligence capabilities, creating data-driven analytics and machine-learning models to proactively detect sophisticated cyber threats, anomalies, and TTPs from diverse threat actors (nation-state, criminal, hacktivist); collaborated with cross-functional teams (cybercrime, e-crime, government, intelligence).
- Provided senior leadership, strategic oversight, and technical mentorship, leading cybersecurity engagements, proposal development, client presentations, risk identification and mitigation, attack surface management, and utilization of collaboration platforms (Jira, ServiceNow, Confluence), enabling cybersecurity program maturity, threat intelligence, and enhanced decision-making for commercial and government clients.

Global Cyber Investigative Intelligence/Cyber Analytics Sr.
Program Lead

Mar 2018 - Jan 2019

Citibank • TAMPA, UNITED STATES

Led data science and machine learning initiatives for a Global Cyber Investigative Intelligence program; developed cyber intelligence, OSINT, investigative analytics, and threat intelligence using data lake architectures for efficient analysis.

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- Tracked nation-state actors/APTs by analyzing SOC reports to identify tactics, techniques, and procedures (TTPs); conducted cyber threat research, including dark web analysis, forensic data evaluation, and penetration test reviews to detect security gaps.
- Enhanced cybersecurity analytics by quantifying cyber intelligence into mathematical models; applied GDPR knowledge to implement security controls for EU data compliance, and recommended actionable controls for security improvements.

Senior Security Engineer/Analyst
Centene • TAMPA, UNITED STATES

Nov 2015 - Mar 2018

Delivered comprehensive IAM solutions integrating critical infrastructure with SailPoint IdentityIQ, automating role assignments and policy enforcement. Drove best practices in Role-Based Access Control (RBAC), creating custom IAM attributes and security policies within SailPoint to effectively manage access risk and compliance.

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Infrastructure IT Support
Raymond James Financial

Jan 2013 - Nov 2015

Minor League Professional baseball player
Houston Astros Minor League

Jun 2007 - Jun 2009

EDUCATION

Master of Science (M.S.)
University of South Florida • Tampa, FL
Cybersecurity (Cyber Intelligence)

Bachelor of Arts (B.A.)
University of South Florida • Tampa, FL
Criminology

Associate of Science (A.S.)
Hillsborough Community College • Tampa, FL
Network Security & Digital Forensics

SKILLS

Amazon Nova
SageMaker Studio
Generative AI
Agentic AI
Predictive Modeling
Amazon Bedrock
Semantic Search
Neural Search
LLM Integration
Streaming
LangChain
Elasticsearch/OpenSearch
Glue
Athena
Data Lake
Kinesis
MSK
ETL Pipelines
Amazon AI Services
Graylog
CrowdStrike
SailPoint
Tenable
Proofpoint

CERTIFICATIONS

AWS Data Analytics
AWS

AWS Solutions Architect
AWS

AWS Associate
AWS

Developer Associate
AWS

Cloud Practitioner
AWS

Splunk Power User
Splunk