Jeffrey Plewak | Senior Software Developer

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Professional Summary:

Senior Python engineer with **10+ years of experience** designing and operating data-driven, enterprise production systems across cloud infrastructure and compliance-critical environments. Background includes safety-critical software, cloud-native platforms, and applied AI workflows. Strong system design with focus on deterministic behavior, clear interfaces, reproducibility, and correctness. **Enterprise experience includes J.P. Morgan Chase, Lockheed Martin, and startup environments,** with a track record of mentoring engineers and improving engineering quality across teams.

Core Technical Skills:

- **Languages:** Python (Expert), Java, C/C++, Go, TypeScript/JavaScript, SQL
- **Backend & APIs:** Python backend services (FastAPI, Flask); Node.js APIs (REST, gRPC)
- **AI & Data Systems:** LLM workflows, RAG pipelines, LangChain, LangGraph, NLP, OCR
- **Cloud & Platform Engineering:** AWS (EKS, EC2, Lambda, S3, RDS), Kubernetes, Docker, Terraform
- **Algorithms & Performance:** Data structures, concurrency models, latency and throughput **optimization, profiling and performance tuning**
- **Reliability & Observability:** OpenTelemetry, Prometheus, Grafana, distributed tracing
- **Security & Compliance / Code Analysis:** SBOM/SCA, SLSA, artifact signing, audit-ready pipelines, LDRA, CycloneDX, statement and branch coverage
- **Quantitative & Analytics:** Large-scale telemetry, performance analytics, system metrics (latency, throughput, error rates), financial risk assessment, equity and fixed-income portfolio monitoring, compliance instrumentation

Professional Experience:

MSTRO.ai — Senior Software Engineer (Contract, Remote)   *09/2024 – 11/2025*
- *Designed and delivered AI platform components with deterministic orchestration and audit‑friendly workflows. Python, Erlang, React/Typescript. Docker compose, and K8's.*
- *Built multi‑agent LLM systems using LangGraph and LangChain with strict schemas, observability, and performance awareness.*

- *Implemented provenance and policy enforcement patterns for regulated AI use cases.*
- *Unique algorithms and features for business domains. Strong emphasis on architecture SOLID, EDA/SOA.*

MyGeo LLC — Python Developer, Member/Owner (Remote)   *02/2024 – 09/2024*
- *Developed cloud-based SEO and communications platform integrating AI workflows with external APIs and services Softr, make.com, flask, React. Full scope MVP to delivery.*
- *Built full-stack systems using Python, Node.js, React/Next.js, and MongoDB with automated ETL pipelines. Java, Python, React.*
- *Implemented ML/LLM orchestration using local and hosted models with reproducible pipelines. Perplexity, GPT, Ollama and personal models.*

J.P. Morgan Chase — Senior Software Engineer (Platform / SRE)   *07/2022 – 12/2023*
- *Built cloud native automation tools using Python, React, Flask, and AWS to support internal platform engineering and cross department outward customer and internal development efforts.*
- *Reduced deployment risk by automating environment validation across staging and production.*
- *Served as production SRE for global banking systems on AWS and EKS under regulated change controls for many environments.*
- *Pioneered automation and improvements in platform engineering*

W2 Consulting (Nintendo, Raytheon, AWS) — Senior Consultant (Remote)   *09/2019 – 03/2022*
- *Led modernization and migration programs for application porting.*
- *Developed ETL pipelines and backend services using Python, Java, and C++.*
- *Automated build pipelines, infrastructure provisioning, and documentation workflows on AWS.*
- *Heavy emphasis on leading, delivering, presenting, customer facing demos.*

IBM Cloud — Senior Software Engineer   *01/2019 – 09/2019*
- *Designed and operated Kubernetes-based microservices in Python and Go with high availability guarantees in SLO/SLA.*
- *Owned CI/CD pipelines and participated in SRE incident response and root cause analysis Service now.Implemented observability and reliability practices improving incident detection and recovery.*
- *Helm, K8's, Splunk, Github. Custom bots for automation.*

Lockheed Martin — Senior Software Engineer   *01/2018 – 12/2019*
- *Developed real-time C++ systems for F-35 avionics in certification-aware environments for Mission Systems Pilot Systems tactical multi functional display for pilots.*
- *Automated build and test instrumentation pipelines improving compliance efficiency. DO-178 A/B. Automated vaseline and certifications. Major reduction in engineering hours allowing more room for process improvement and new tool evaluations.*
- *Achieved full statement and branch coverage with traceable artifacts and audit support via LDRA, greenhills, ada multi. C++/Python/Perl, Bash.*

Fidelity Investments — Senior Python Engineer   *04/2015 – 12/2017*
- Built and maintained Django backend , Angular Frontend systems with rollback and profiling support for a large multi year automation network program.
- Refactored monolithic applications into service-oriented architectures, full stack, API integrations and load balancing applications (F5).
- Improved development workflows and SDLC automation.
- Led mentored and trained new employees.

Lockheed Martin — Software Engineer
06/2012 – 04/2015
- Automated avionics simulations under DO-178 compliance requirements.
- Radar simulation TPQ-53 and F-35 ballistics radar detection and military field setup.
- Built internal tooling that reduced certification effort and improved traceability.
- Full Software development lifecycle and Agile transformation implementations.

BAE Systems — Software Engineer Associate
05/2011 – 06/2012
- Developed multithreaded radar simulations in Java/C++ and Java for Navy systems.
- Contributed across design, implementation, and baseline development.
- SDLC SCAMPI

Education

B.S. Computer Science 2011.   **University at Buffalo (SUNY), 08/2008 - 05/2011**
GPA: 3.4