

PAUL THOMPSON

Senior Software Engineer | AI Evaluation & Platform Engineering

Miami, Florida | (650) 300-0271 | paul.thompson@gmail.com | LinkedIn

PROFESSIONAL SUMMARY

Senior software engineer with 15+ years of experience building production platforms, APIs, data-intensive services, and cloud-native applications. Recent work includes Python-based AI and LLM evaluation workflows, automated test harnesses, scoring and comparison tools, dataset processing, and internal dashboards used to investigate output quality and reliability. Strong background in software architecture, distributed systems, CI/CD, containerized deployment, database performance, and production troubleshooting. Comfortable translating loosely defined research or product requirements into repeatable engineering systems and documenting decisions for remote, asynchronous teams.

CORE COMPETENCIES

AI Evaluation: LLM output evaluation, benchmark design, test harnesses, rubric-based scoring, regression testing, failure-mode analysis, prompt experiments

Python & Data: Python, FastAPI, pandas, NumPy, data validation, ETL/data pipelines, SQL, large-dataset processing, visualization

Platform Engineering: REST APIs, microservices, distributed systems, internal tools, workflow automation, performance optimization

Cloud & Delivery: Azure, AWS, Docker, Kubernetes, Azure DevOps, Git, CI/CD, automated testing, observability

Additional Engineering: C#, .NET Core, ASP.NET Core, TypeScript, Angular, React, SQL Server, PostgreSQL, MongoDB, Redis

PROFESSIONAL EXPERIENCE

NodeAsset | Senior Lead Software Engineer (Dec 2021 - Jul 2026)

Led engineering work for cloud-based, data-intensive applications supporting financial and business-critical workflows, with responsibility spanning architecture, backend services, evaluation tooling, delivery, and production reliability.

- Designed Python services and FastAPI endpoints for running repeatable AI/LLM evaluation workflows, processing model outputs, and exposing results to internal users.
- Built automated test harnesses that executed prompt and model test cases, captured outputs and metadata, applied configurable scoring rules, and compared results across evaluation runs.
- Developed data-processing pipelines with Python, pandas, NumPy, and SQL to clean, validate, aggregate, and analyze large evaluation and operational datasets.
- Created internal dashboards and APIs that helped engineering and product teams track evaluation status, inspect examples, compare model behavior, and identify regressions.
- Worked with stakeholders to convert evaluation criteria and ambiguous quality expectations into versioned datasets, reproducible tests, and clearly documented acceptance rules.
- Investigated edge cases and failure patterns in AI-generated outputs, including inconsistent formatting, unsupported conclusions, instruction-following errors, and unreliable responses.
- Designed scalable REST APIs and backend services using Python, C#, .NET Core, and ASP.NET Core within microservice-oriented systems.
- Improved performance and cost efficiency through batching, query optimization, asynchronous processing, caching, and targeted application profiling.
- Deployed containerized services to Azure using Docker and Kubernetes; used Azure App Services, Functions, SQL Database, and Storage for production workloads.
- Built CI/CD workflows in Azure DevOps and Git, adding unit, integration, regression, and API tests as release gates.
- Led design reviews, code reviews, incident analysis, and technical documentation while collaborating asynchronously with engineering, QA, DevOps, and product teams.

Five Pack | Senior Software Engineer (Nov 2019 - Dec 2021)

Built enterprise web applications, data services, APIs, and internal tools for large-scale business operations.

- Developed Python and .NET backend services for data ingestion, validation, transformation, and workflow automation.
- Built RESTful APIs and reusable service components using FastAPI, C#, and ASP.NET Core.
- Created automated unit, integration, and regression test suites for APIs, business rules, and data-processing workflows.
- Designed SQL Server data models and optimized queries supporting transactional, reporting, and analytical workloads.
- Developed Angular and TypeScript dashboards for operational monitoring, data review, and issue investigation.
- Implemented independently deployable services, Docker-based development environments, and Azure DevOps deployment pipelines.
- Diagnosed production defects and performance bottlenecks across application, API, database, and cloud layers.
- Participated in architecture planning, code reviews, documentation, and Agile delivery with distributed team members.

Asure Software | .NET Software Engineer (Oct 2016 - Oct 2019)

Designed and delivered enterprise applications and integration services supporting workforce-management and SaaS products.

- Developed production applications with C#, ASP.NET MVC, .NET Framework, Angular, TypeScript, and SQL Server.
- Designed REST APIs and integration workflows connecting internal platforms and external customer systems.
- Built data-processing routines, stored procedures, views, triggers, and indexes; tuned slow queries and application response times.
- Applied object-oriented design patterns and Entity Framework to create maintainable business and data-access layers.
- Wrote unit tests, reviewed code, supported releases, and resolved production issues in an Agile/Scrum environment.

Meta Materials Inc. | .NET / SQL Developer (May 2014 - Sep 2016)

Developed database-driven enterprise applications, backend services, and business workflow integrations.

- Built applications and APIs using C#, .NET, JavaScript, Angular, and SQL Server.
- Designed reusable modules and data-processing components for business-critical workflows.
- Supported testing, deployment, troubleshooting, query optimization, production operations, and peer code review.

Patsnap | Junior Web Developer (Jun 2012 - Apr 2014)

Contributed to web applications and database integrations supporting business and research workflows.

- Developed and maintained features using C#, ASP.NET, JavaScript, HTML, CSS, and SQL Server.
- Built backend functions, SQL queries, and stored procedures; participated in testing, debugging, deployment, and support.

EDUCATION

Argosy University | Bachelor of Science in Computer Science (Aug 2008 - May 2012)

TECHNICAL SKILLS

Languages: Python, C#, SQL, TypeScript, JavaScript, Java, C++

AI & Data: OpenAI APIs, LLM evaluation, prompt engineering, pandas, NumPy, data pipelines, model-output analysis, benchmark and regression workflows

Frameworks: FastAPI, Django, .NET Core, ASP.NET Core, Angular, React, Node.js, Entity Framework Core

Cloud & Infrastructure: Azure, AWS, Docker, Kubernetes, Azure DevOps, CI/CD, Git

Databases: SQL Server, PostgreSQL, MySQL, MongoDB, Redis

Testing & Quality: pytest concepts, unit/integration/API testing, regression testing, MSTest, Jest, Cypress, code review, secure SDLC

Security: OAuth 2.0, JWT, RBAC, TLS/SSL, encryption, OWASP, secure API design