Stephen Jaoudi

✉ stephenjaoudi@outlook.com 🌐 sjaoudi.github.io 💼 linkedin.com/in/sjaoudi 🐙 github.com/sjaoudi

Summary

Full-stack software engineer with 6+ years of experience building and operating high-volume systems in the financial trading and healthcare industries, with a specialization in Microsoft technologies (C#, .NET, Azure). Experienced in scalable system design, production ownership, and cross-team collaboration.

Employment

RXNT
August 2021 – March 2023

Senior Software Engineer · *Annapolis, MD*

- Served as lead developer for a HIPAA-compliant health insurance claims processing system handling $300M+ in claims annually
- Rewrote insurance eligibility and claim generation systems using multi-tenant, event-driven architectures with Azure Service Bus and Azure Functions, improving scalability and reducing processing latency
- Migrated legacy .NET Framework applications to .NET Core and deployed containerized services on Azure using CircleCI CI/CD pipelines, modernizing applications and deployment processes
- Collaborated with product designers to build Angular UIs with TypeScript for insurance claim workflows using reactive patterns and reusable components
- Conducted technical and behavioral interviews for software engineering candidates of all levels

Susquehanna International Group
July 2017 – July 2021

Software Engineer · *Bala Cynwyd, PA*

- Served as a core member of a 6-person agile team developing low-latency profit and loss (P&L) calculations for high-frequency trading systems at a market-leading firm managing $100B+ in assets
- Led development of an ASP.NET application to manage and automate BGP router policy deployment across the firm's global trading network, eliminating manual configuration and streamlining operational workflows
- Responded quickly to production issues during trading hours in a fast-paced environment
- Participated in hiring and onboarding of interns, conducted code reviews, and provided mentorship

MIT Lincoln Laboratory
June 2016 – August 2016

Software Engineer Intern · *Cambridge, MA*

- Developed a Node.js proof-of-concept application to enforce interoperability between aviation instruments
- Presented the project and technical findings to senior management at the conclusion of the program

Code Samples

NES Emulator (github.com/sjaoudi/nesemu) | *C, gcc*

- Hardware emulation of the NES 6502 CPU and 2C02 picture processing unit

CUDA Raytracer (github.com/sjaoudi/cuda-raytracer) | *C++*

- GPU-accelerated ray tracing program to render STL files, a standard format for representing 3D triangular meshes used in CAD and 3D printing

Education and Certifications

Swarthmore College
September 2013 – May 2017

Bachelor's Degree in Computer Science, Minor in Mathematics · *Swarthmore, PA*

AZ-900 - Azure Fundamentals — **February 22 2025**

SC-900 - Security, Compliance, and Identity Fundamentals — **April 22 2025**

Technical Skills

Languages: C#, SQL (SQL Server, PostgreSQL), Python, TypeScript, JavaScript, HTML, CSS

Frameworks & Libraries: .NET (Core & Framework), ASP.NET, Entity Framework, Angular, RxJS, Terraform

Testing & Tools: xUnit, NUnit, Moq, Jest, Visual Studio, VS Code, Git, DataDog, GitHub Copilot

Additional Activity

Sabbatical
March 2023 – November 2025

- Personal pursuit of long distance hiking trails across the U.S. such as the Appalachian Trail (2023), Pacific Crest Trail (2024), and Continental Divide Trail (2025)
- Applied real-time decision-making and risk mitigation in challenging conditions, including gear management, snow travel, and navigating around active wildfires