JAMES HART

jeh@duck.com

[LinkedIn](#) | [GitHub Repos](#) | [GitHub Blog](#) | [GitHub Resume](#)

Senior software engineer with 10+ years of professional experience in full-stack development and DevOps practices in agile environments across finance and other industries. Proven track record in building a wide range of scalable, high-performance applications and improving on existing system architecture. Extensive automation experience. Strong background implementing CI/CD pipelines and secure Cloud hosted environments to streamline deployment of microservices and multi-tier applications. Specializing in Python, .NET, and JavaScript.

SKILLS

Languages: Python | .NET (C#/F#) | JavaScript | Rust | Java | PowerShell | Go | PL/SQL | T-SQL

Development Frameworks: ASP.NET Core | Python Flask | JavaScript: React, Node.js, Bootstrap, Angular | Spring Boot

Databases: SQL: Microsoft SQL Server, Oracle, PostgreSQL | NoSQL: Redis, MongoDB

Development Methodologies: Agile | Domain Driven Design (DDD) | Test Driven Design (TDD)

DevOps & CI/CD Tools: Azure DevOps Services | Jenkins | GitHub Actions | Docker | Git | TFS | Bitbucket | Octopus Deploy | TeamCity | Jira

Cloud Platforms & Services: Microsoft Azure | Okta | Heroku

Configuration Management: Chef | Ansible | ARM Templates

Application Monitoring: ITRS | New Relic | PRTG

Messaging Systems: AMPS | Redis Pub/Sub | RabbitMQ | RESTful APIs

HONORS & ACHIEVEMENTS

- Built an Angular web application backed by a Python-Flask API to automate server information management, significantly improving software deployment processes
- Developed Pester scripts adopted by development teams company-wide to automate validation of application configurations during software upgrades, reducing manual effort by 99% (from 2 days to 30 seconds) and significantly minimizing troubleshooting time
- Automated the creation and configuration of Hyper-V Windows VMs using PowerShell and Chef, reducing setup time by 98% (from 2-4 days to 30 minutes)
- Automated software deployment processes using PowerShell including inserting XML data into databases and IIS configuration, decreasing setup time by 98% (4 hours to 5 minutes)
- Recognized twice at the company level for exceptional impact as a senior member of a small team, significantly improving company-wide development processes and setting new standards for efficiency and collaboration
- Recognized for excellence in managing complex release processes by ensuring comprehensive and compliant documentation that met external regulatory requirements, streamlining workflows, and enhancing team efficiency
- Featured interviewee on Pluralsight's [All Hands on Tech Podcast Episode 056](#) – Upskilling Tips and Tricks with Developer James Hart

EXPERIENCE

Software Engineer III

Bank of America – Houston, TX   *02/2022 – Present*

- Enhanced and supported microservice-based commodities market data management applications for Oil, Emissions, and Natural Gas desks, ensuring data accuracy and availability to downstream Risk and PnL systems
- Developed curve marking features that eliminated dependency on spreadsheets, improving data integrity and user efficiency
- Led the successful transition of the Emissions and Natural Gas desks from spreadsheets to a robust price curve marking application, resulting in increased efficiency and data accuracy
- Mentored junior team members in best practices for modern software engineering, fostering a collaborative and innovative team culture
- Improved system architecture to provide real-time data tracking through downstream systems, increasing transparency and reducing data errors by 20%
- Designed and implemented a feature for same-day curve initialization, streamlining processes and eliminating the need for overnight processing
- **Tools**: Python (Quartz), React/Redux, AMPS Messaging, BofA NoSQL DB, ITRS, Bitbucket, Jenkins

Software Engineer II

Bank of America – Houston, TX   *10/2019 – 01/2022*

- Spearheaded the development of key features to retire a legacy application, coordinating with cross-functional teams and delivering the project under a tight year-end deadline, resulting in reduced maintenance costs and improved system performance
- Enhanced middle-office reconciliation applications, reducing data entry time from weeks to minutes and improving operational efficiency
- Resolved recurring erroneous alerts in an Exchange limit monitoring application, restoring system reliability and user trust
- Developed an ETL feed mapping Exchange accounts to trader books, enabling accurate position tracking and compliance with regulatory limits
- **Tools**: ASP.NET/C#, MSSQL, Python (Quartz), BofA NoSQL DB, Bitbucket, Jenkins, Ansible

Senior Software Consultant

Credera – Houston, TX   *05/2019 – 10/2019*

- Collaborated with clients to solve their biggest technological challenges and contributed to a culture of continuous learning and improvement
- Supported a large-scale Microsoft Dynamics CRM installation and surrounding custom applications, ensuring system stability and performance
- Led company-wide tutorial labs covering DevOps tools, concepts, best practices and enhancing team skills in CI/CD processes for junior members

- **Tools**: PowerShell, MSSQL, Jenkins, Octopus Deploy, New Relic, PRTG

Senior Software Operations Engineer

Quorum Business Solutions Inc. – Houston, TX   *03/2018 – 05/2019*

- Managed operational processes to decrease development life cycle timelines under an agile software development methodology
- Developed tools, built scripts, and created documentation used for client-side web server and .NET framework based software installations
- Automated Azure DevOps release pipeline creation for deployment of software applications, increasing process efficiency by 90%
- Migrated n-tier application environments to Azure Cloud, allowing the business to evaluate cost and time savings
- Developed a web application to automate server information management, significantly improving software deployment processes
- **Tools**: PowerShell, .NET/C#, RabbitMQ, Oracle, MSSQL, Azure DevOps Services, Chef, Ansible, Azure, TeamCity

Senior DevOps Engineer

Quorum Business Solutions Inc. – Houston, TX   *01/2017 – 02/2018*

- Automated and standardized internal software deployment processes, reducing completion times from days to minutes and speeding up software delivery timelines
- Supported and enhanced internal processes, minimizing manual errors and improving process reliability
- Designed and implemented a standardized SQL script template for managing database settings, streamlining database administration across environments and data refreshes
- Deployed and debugged application and database installations in clients' non-Production and Production environments
- **Tools**: PowerShell, .NET/C#, Oracle, MSSQL, Azure DevOps Services, TeamCity

Senior Software Implementation Consultant

Quorum Business Solutions Inc. – Houston, TX   *04/2014 – 12/2016*

- Implemented Quorum Land Suite software upgrade for major clients, leading small teams across multiple successful project completions
- Managed business and IT expectations throughout the project lifecycle from internal development to Production cutover and transition to long-term product software maintenance
- Developed an Oracle database package to streamline legacy data migration, reducing upgrade timelines from months to weeks
- **Tools**: Oracle, .NET/C#

Software Implementation Consultant

PowerPlan Inc. – Atlanta, GA   *06/2012 – 03/2014*

- Implemented PowerTax software for major corporate clients, providing expertise in utility tax accounting and Oracle SQL scripting
- Coordinated script migrations and database management with clients' IT
- **Tools**: Oracle SQL

PROJECTS & INTERESTS

Feldspar
- Microservice-based market data visualizer with websocket architecture ([my repo](#) / [Azure site](#))
- **Technologies**: docker, Node.js, ReactJS, C#, Java, nginx, Redis pub/sub and caching
- Deployed as a multi-container **Azure App Service** with **Docker Compose**

MediatR vs Discriminated Unions
- A comparison of the C# MediatR library with F# Discriminated Unions ([my repo](#) / my write-up: [mediatr-vs-discriminated-unions](#))
- **Technologies**: .NET, MediatR

RsTodo
- A command line task tracking and reporting tool with file and SQLite persistence ([my repo](#))
- **Technologies**: Rust, SQLite

Advent of Code solutions
- Solutions to select Advent of Code (cf. [adventofcode.com](#)) puzzles ([my repo](#))
- **Technologies**: .NET, Python

Ticket management sites
- Websites inspired by Jira using different technology stacks
- [TicketPusher](#): C#, Blazor, .NET Core Web API, EF Core, Azure SQL Database, Docker, Okta
  - Deployed as a multi-container **Azure App Service** with **Docker Compose**
  - Utilizes **GitHub Actions** to push containers to **Azure Container Registry (ACR)**
- [pytickets](#): Python, Flask, Bootstrap, PostgreSQL, Okta, Heroku
- [gotickets](#): Go, MongoDB, HTML

EDUCATION

Bachelor of Arts in Mathematics, Minor in Computational and Applied Math

Rice University – Houston, Texas   *08/2008 – 05/2012*

- GPA: 3.8, Cum Laude
- Publication: *Energy-minimizing unit vector fields*
- National Hispanic Merit Scholar

Prior experience references available upon request.