James Hart

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Results-driven Senior Software Engineer with 10+ years of professional experience in full-stack development and DevOps across multiple industries. Proven track record in building scalable, high-performance applications using **Python**, **.NET (C#/F#)**, and **JavaScript** with expertise in both **SQL** and **NoSQL** databases. Strong background in implementing CI/CD pipelines using **Azure DevOps**, **Jenkins**, and **Ansible** to streamline deployment of microservices and multi-tier applications. Adept at driving process automation, mentoring teams, and continuously enhancing engineering practices to align with strategic business objectives.

Skills

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

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

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

Messaging Systems: AMPS | Redis Pub/Sub | RabbitMQ

DevOps Tools: Azure DevOps Services | Jenkins | Docker | Git | TFS | Bitbucket | Octopus Deploy | TeamCity | Jira

Cloud Platforms & Services: MS Azure | Okta | Heroku

Configuration Management: Chef | Ansible | ARM Templates

Application Monitoring: ITRS | New Relic | PRTG

Others: Agile | Domain Driven Design | TDD | RESTful APIs

Projects

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**

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

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

AoCSolver
- A website to solve Advent of Code puzzles ([my repo](#))
- **Technologies**: Python, Javascript, Heroku

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

Achievements

Led the transition of a key set of users from spreadsheet-based processes to a robust curve marking application by developing necessary features, providing training and support, resulting in increased efficiency and data accuracy, and enhanced user satisfaction.

Spearheaded the development of key features to retire a legacy Exchange limit tracking application, effectively coordinating with cross-functional teams and delivering the project under a tight year-end deadline, resulting in a seamless transition, reduced maintenance costs, and improved system performance.

Implemented an automated deployment pipeline that reduced deployment time by 90% and eliminated manual errors, leading to a more efficient development lifecycle.

Recognitions

Pluralsight's [All Hands on Tech Podcast Episode 056](#) – Upskilling Tips and Tricks with Developer James Hart

National Hispanic Merit Scholar

Experience

Software Engineer III

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

- Collaborated on the enhancement and support of microservice-based commodities market data management applications, ensuring data accuracy and availability for downstream systems
- Developed curve marking features that eliminated dependency on spreadsheets, improving data integrity and user efficiency
- Mentored junior team members in best practices for modern software engineering, fostering a collaborative and innovative team culture
- Enhanced 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*

- 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*

- Provided expert support for a large-scale MS Dynamics CRM installation, ensuring system stability and performance
- Led company-wide DevOps tutorials, sharing best practices and enhancing team skills in CI/CD processes
- **Tools**: PowerShell, MSSQL, Jenkins, Octopus Deploy, New Relic, PRTG

Senior Software Operations Engineer

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

- Automated Azure DevOps release pipeline creation, achieving a 90% increase in deployment process efficiency
- 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, Chef, Ansible, Azure, TeamCity

Senior DevOps Engineer

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

- Automated software deployment processes, reducing completion times from days to minutes and minimizing manual errors
- Designed and implemented a standardized SQL script template for managing database settings, streamlining database administration across environments and data refreshes
- **Tools**: PowerShell, .NET/C#, Oracle, MSSQL, Azure DevOps, TeamCity

Senior Software Implementation Consultant

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

- Implemented Quorum Land Suite software for major clients, leading teams and driving successful project completions
- 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, Georgia *06/2012 – 03/2014*

- Implemented PowerTax software for corporate clients, providing expertise in utility tax accounting and Oracle SQL scripting
- **Tools**: Oracle SQL

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* - <u>Involve: A Journal of Mathematics (Vol. 3, No. 4, 2010)</u>
- Trustee Distinguished Scholarship

References

Available upon request.