

JAMES JONES

linkedin.com/in/jamesjonessoftware/
Durham, NC

Phone: 919.321.7043
james.russel.jones@gmail.com

SENIOR SOFTWARE ENGINEER

Design and Development of Enterprise Scale Applications with Large Data Requirements

Highly accomplished .NET and C# Software Developer with 12 years of experience in large scale application development for Enterprise Banking, Healthcare, and Manufacturing companies. Proven success with modernization and architecture redesign of mission-critical software applications meeting all production deadlines in a secure, highly regulated environment. Signature accomplishments include the design and implementation of a web service at Charles Schwab using ASP.NET Core, MongoDB and Aerospike that provides portfolio and account management features for millions of accounts and trillions of dollars of financial assets. Developed software on a .NET-based front-office trading platform for Deutsche Bank which helped to manage a multi-billion-dollar portfolio of interest rate derivatives. Collaborates effectively with Executive Management, stakeholders, and the development team.

AREAS OF EXPERTISE

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|---------------------------------|----------------------------|---------------------------|
| ▪ Software Development | ▪ Software Design | ▪ Software Architecture |
| ▪ Scaled Agile Framework (SAFe) | ▪ Web Services | ▪ Full Stack Developer |
| ▪ Large Scale Development | ▪ Test Driven Development | ▪ Application Integration |
| ▪ Issue Tracking | ▪ Code Quality/Reuse | ▪ Predictive Analytics |
| ▪ Legacy Platform Transitions | ▪ High Volume Transactions | ▪ Lean-Agile Practices |
| ▪ Production Systems | ▪ Roadmaps | ▪ Business Requirements |
| ▪ Project Leadership | ▪ Project Management | ▪ Distributed Systems |
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PROFESSIONAL EXPERIENCE

CHARLES SCHWAB, DURHAM, NC

7/2018- Present

STAFF SOFTWARE DEVELOPMENT ENGINEER

Integrate enhanced portfolio and accounting functions for the company's flagship offerings

- Subject matter expert and design lead for a complex, transformational scalability project to permanently migrate 2 million accounts from MongoDB to Aerospike and expand capacity for 20 million accounts.
- Design and implement web services using ASP.NET Core and MongoDB that provides portfolio and account management features for millions accounts and trillions of dollars of assets under custody at Schwab.
- Pioneered the design of several bespoke indexing data structures to fulfill scalability requirements.
- Deliver significant value during each bi-weekly sprint deadline, demonstrating the ability to identify the critical path of getting features to production and then diligently facilitating that process from start to finish.
- Applies lean-agile practices at the enterprise level to identify critical paths, inter-team dependencies, ensure the product owner prioritizes the critical path and consistently hit future goals.
- Utilize test-driven development and dependency inversion/injection to maximize code quality.
- Facilitate integration by running development environments side-by-side and debugging them interactively.
- Capitalize on 14 years of programming experience to advocate new approaches that increase the effectiveness of the team, particularly during retrospectives.

DEUTSCHE BANK, DURHAM, NC

9/2015- 7/2018

SOFTWARE ENGINEER

Developed software on a .NET-based front-office trading platform which helped manage a multi-billion-dollar portfolio of interest rate derivatives

- Integrated a number of systems in order to facilitate the calculation of counterparty risk exposure, which is used for making hedging trades and complying with capitalization regulation.
- Designed and implemented BRDS, PKS (equity), RMS, and reference data integration.

- Discovered a way to reliably remove concurrency locks from the trading system by implementing a temporal, immutable data model and asynchronous processing model, vastly improving throughput and system stability.
- Refactored, simplified and modernized a legacy codebase while increasing the scalability of the platform.
- Modernized trading software so that it runs an order of magnitude faster and remain in compliance with financial regulations, rendering the system easier to audit since the data was now immutable and could not be changed by other threads.
- Improved readability and resolved architectural issues during code reviews, providing actionable insights in an environment of strict regulatory control and price-sensitive information.
- Utilized Veracode static code analysis tools to identify and resolve security vulnerabilities.
- Implemented Solace queue integration to provide asynchronous notification to external systems.
- Implemented software to stream tens of millions of trades per day between web services.

PRECISION LENDER, DURHAM, NC**9/2014- 7/2015****SOFTWARE DEVELOPER****Full-stack .NET developer on a team responsible for developing a commercial loan pricing product hosted on Microsoft Azure**

- Collaborated with the CEO and commercial loan bankers to develop new features on a commercial loan product that earns over \$4 million in revenue annually.
- Triaged and investigated bugs, including CPU-related performance issues.
- Re-platformed the flagship product from Silverlight to modern JavaScript/HTML5.

HEALTH DECISIONS, DURHAM, NC**8/2012- 8/2014****SOFTWARE ENGINEER****Full-stack software developer of an ASP.NET-based bespoke clinical trial management system**

- Appointed "Project Leader" for several successful development initiatives, building randomization, blinding, supply management, and security modules
- Collaboratively developed new components for the systems with the Business Analysis and Quality Assurance staff.
- Prepared, tested and deployed code to production on a bi-monthly release cycle while triaging and remediating any production issues that arose.

LORD CORPORATION, DURHAM, NC**8/2006- 8/2012****APPLICATION DEVELOPER (IS SPECIALIST)****FULL-STACK .NET SOFTWARE DEVELOPER FOR DOZENS OF LINE-OF-BUSINESS SOFTWARE SYSTEMS**

- Modernized an elaborate system of interconnected services which coordinated major manufacturing activities, reverse-engineering Fortran line-by-line as the sole developer on this complex transformation.
- Collaborated with a Lord Corporation Fellow to create algorithms to model the behavior he was observing in the laboratory, resulting in developing a proprietary rubber elastomer blending simulator that could pull data from SAP and output instructions to fill orders.
- Top developer during tenure , saving millions of dollars in reduced rework and waste, decommissioned hardware, maintenance, and turnaround time, while increasing manufacturing productivity.
- Utilized predictive analytics to develop a Six Sigma quality control system and developed over a dozen SAP Business One add-ons and integrations.
- Mentored junior developers, familiarizing them with the security requirements of ITAR regulation.

Technical Skills: Programming: C#, ASP.NET, JavaScript, HTML5, FORTRAN **Framework:** Web API, MVC, MVVM, ORM **Database:** MongoDB, Aerospike, Microsoft SQL Server **Issue Tracking:** Atlassian Stack (Jira, BitBucket, Bamboo) **Code Analysis Tools:** Veracode, SonarQube **Cloud:** Azure, GCP, AWS, Netlify

Education**B.S. in Software Engineering, Minor in Management Information Systems, The Penn State University, PA**