**Jesse Squire**

Manahawkin, NJ 08050

<https://www.jessesquire.com>

<https://www.github.com/jsquire>

**SUMMARY**

Seasoned technical professional with more than twenty years of diverse experience in various roles involving the architecture, development, delivery, and management of software products and the teams that deliver them.

* Held leadership responsibility for mission-critical infrastructure on one of Microsoft’s most visible products (Halo)
* Thorough knowledge of software architecture, best practices, and industry trends
* Proficient with software delivery as part of distributed teams, comprised of remote members and/or offshore partners
* Experienced in high-availability environments with extreme scale needs (topping several thousand requests per second)
* Skilled in service-oriented architecture, distributed systems, and reactive systems
* Familiar with a diverse set of platforms, languages, and tools
* Exceptional analytical, problem solving, critical thinking, and interpersonal skills

**TECHNICAL EXPERIENCE**

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| *Languages:* | C#, ECMAScript/JavaScript, SQL, HTML, CSS, F#, TypeScript, Python, PowerShell, Java, C/C++, Ruby, Visual Basic, PHP, x86 Assembly |
| *Databases:* | SQL Server, Oracle, Azure Storage, Azure CosmosDB, MongoDB, MySQL, PostgreSQL, SQLite |
| *Platforms:* | Microsoft Azure, Web, Windows, Xbox, Linux |
| *Concepts:* | Object-Oriented Programming (OOP), Functional Programming (FP), Dependency Injection (DI), Automated Testing, Asynchronous Programming, Service Oriented Architecture (SOA), REST, Distributed Systems, Serverless, Messaging Systems, Software as a Service (SaaS), Command/Query Responsibility Segregation (CQRS), Multithreading, Aspect-Oriented Programming (AOP), Domain Driven Development (DDD), Test Driven Development (TDD), Eventual Consistency, Reactive Systems, Threat Modeling, Resiliency Modeling, Extreme Programming (XP), Scrum |
| *Technologies:* | Microsoft.NET, RESTful Services, WebAPI, ASP.NET MVC, Node.js, Azure Functions, Azure Service Bus, Azure Event Hubs, Azure Event Grid, Microsoft Orleans, Xbox Live, Xbox One XDK/ADK, Web Sockets, AMQP, Azure Service Fabric, Django (v1.4), Windows Communication Foundation (WCF), Windows Presentation Foundation (WPF), XML/XSL/XSD, Win32 API |
| *Tools:* | Visual Studio, Visual Studio Code, Git, Mercurial, Subversion, Azure DevOps, Fiddler, Postman, AutoFac, Ninject, xUnit, MSTest, MSBuild, Octopus Deploy, Dapper, Entity Framework, Orchard, Solr, Elastic Search |

# PROFESSIONAL EXPERIENCE

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| **Microsoft** | **October, 2017 – Present** |
| *Senior Software Engineer, Commercial Software Engineering* | (Remote Employee) Redmond, WA |

Senior Software Engineer for the Commercial Software Engineering group. We partner with Microsoft industry customers to help them achieve success with Microsoft platforms, services, and technologies such as Azure, Xbox, HoloLens, and Windows. Our goal is to meet partners where they are, coding together to solve real-world business problems and overcome technical challenges. To do so, we embrace a diverse set of tools, languages, and technical environments.

As these problems can often be things that others experience or are interested in, another of our core goals is to circulate our learnings so that they can benefit others. This typically takes the form of technical articles, conference talks, presentations at meet-ups, or participation in hackfests and other events.

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| **Mimeo** | **April, 2016 – September 2017** |
| *Principal Software Engineering Lead* | (Remote Employee) New York, NY |

Engineering Lead for the Product Technology team (10 engineers/management), owners of the mission-critical systems responsible for order processing and the internal tools that monitor and manage them. Together, these systems and tools control more than 80% of the company's revenue stream.

Primarily responsible for managing a geographically distributed development team, the architecture and implementation of software, and collaborating with project management and product owners to prioritize, plan, and deliver business value through software. Also responsible for recognizing and championing improvements to the company’s technical stack, processes, and product offerings, coordination with other teams to identify shared technology and produce common services/libraries, and serving as the technical representation for executive product pitches/reviews. Selected projects:

**Mimeo Photos:** The company’s first consumer-centric offering, Mimeo Photos is an extension within the macOS Photos application, allowing users to design and order physical media such as photo books, holiday cards, and calendars using the images in their macOS photo library. My group was responsible for functionality related to order fulfillment, once a purchase was made. Requests for order fulfillment were received and handled in an asynchronous manner, starting with an API request that triggered a distributed workflow organized around commands. Designed to be resilient, the workflow is able to understand when critical dependencies are unavailable and perform both long and short period retries, raising alerts for human intervention when automated recovery is not possible. The software leverages Azure heavily as a platform and provider of services, building on top of App Services, Web Jobs, Service Bus, Azure Storage, and Application Insights.

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| ***Role:*** | ***Architect and Development Lead*** |  |
| ***Team Size:*** | ***4*** |  |
| ***Environment:*** | ***C#, Azure App Services, Azure WebJobs, Azure ServiceBus, Azure Storage (blob), REST, WebAPI, Application Insights, Azure Resource Manager Templates (ARM)*** |  |

**Mimeo Hub:** A platform of microservices providing order-related operations to internal systems and external partners. Positioned as the central authority for orders within Mimeo, the hub has responsibility for handling order submissions and inquiries, performing a diverse set of tasks to guide and manage the order processing workflow, and making intelligent decisions regarding how orders can be produced and fulfilled to maximize company profitability. The Mimeo Hub platform was designed to be scalable, distributed, event-driven and reactive, taking advantage of concepts from Domain Driven Design (DDD) and Command/Query Responsibility Segregation (CQRS). The software utilizes Azure as a platform and provider of services, building on top of Service Fabric, Service Bus, Azure Storage, and Application Insights.

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| ***Role:*** | ***Architect and Development Lead*** |  |
| ***Team Size:*** | ***6*** |  |
| ***Environment:*** | ***C#, Azure Service Fabric, Service Fabric Actors, REST, WebAPI, Azure storage (table/blob), Azure Service Bus, Reactive Extensions (Rx), Azure Resource Manager Templates (ARM)*** |  |

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| **Microsoft** | **September, 2013 – April, 2016** |
| *Senior Technical Program Manager, 343 Industries* | Redmond, WA |

Technical Program Manager for the Halo services team (70 engineers/management), which owns the current and next generation services that power the Halo experience across a diverse portfolio of products. Primarily responsible for the conceptualization and design of RESTful services to support core game functionality and enable game companion experiences, supporting scalability needs greater than one million concurrent users and up to several thousand requests per second. Key accomplishments include performing the initial discovery, specification work, and implementation to dynamically register and deploy the new Halo 5 dedicated server in the Xbox Live cloud platform, responsibility for mission critical services for Halo 5: Guardians, serving as the all-up owner of services for Halo: The Master Chief Collection and Halo Channel from conceptualization through delivery, and coordination of cross-title reward scenarios across all Halo properties for the 2014/2015 launch windows.

Responsible for partnering with game designers and technical teams to identify opportunities for service integration, writing technical and functional specifications, design and documentation of RESTful service endpoints and API contracts, ownership of integration paths with partner teams to drive support, scheduling, and technical adoption of services within Halo properties, participation in technical architecture design and code reviews, data modeling for service contracts, design and implementation of service monitoring and alerting, and collaboration with other Microsoft Studios teams to share technology and co-develop services. Duties also include serving as a ScrumMaster, threat modeling and security development lifecycle compliance, resiliency modeling and ensuring service reliability, global readiness evaluation, cross-discipline interviewing of employment candidates, and service support/troubleshooting. Member of the URI Review Group, a cross-discipline governing body to ensure RESTful design and consistency of service endpoints across the organization. Selected projects:

**Halo 5: Guardians:** Part of the best-selling Halo video game series, Halo 5: Guardians is a first-person shooter for the Xbox One. Released in late October, 2015, it has set new records for the biggest Halo launch and become the fastest selling entry in the series. This release marks the shift from a peer-to-peer networking stack to a dedicated server running on the Xbox Live cloud platform. Halo 5 incorporates a multifaceted service stack responsible for critical game functionality and supporting rich game companion scenarios.

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| ***Role:*** | ***Technical Program Manager*** |  |
| ***Team Size:*** | ***15*** |  |
| ***Services Environment:*** | ***C#, Azure cloud services, Orleans, REST, Xbox Live services platform, Azure storage (table/blob), Xbox Live Cloud Compute platform*** |  |

**Halo: The Master Chief Collection:** Halo: The Master Chief Collection (HMCC) is a first-person shooter video game released in November 2014, delivering the entire story of the Master Chief for the first time on one console, including a fully remastered Halo 2: Anniversary. HMCC leverages the Halo services stack for enabling of fundamental game operations and cross-title reward integration with Halo Channel, Halo: Spartan Strike, and the Halo 5: Guardians multiplayer beta.

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| ***Role:*** | ***Technical Program Manager*** |  |
| ***Team Size:*** | ***15*** |  |
| ***Services Environment:*** | ***C#, Azure cloud services, Orleans, REST, Xbox Live services platform, Azure storage (table/blob)*** |  |

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| **JBS Custom Software Solutions** | **June, 2011 – August 2013** |
| *Software Architect* | (Remote Employee) Chadds Ford, PA |

Consultant, primarily responsible for the architecture, development, and deployment of custom software solutions for clients such as Ralph Lauren, SoMo Audience, and Guitar Center. Core responsibilities included the design and implementation of client solutions and reusable services/components/frameworks, project and enterprise-level architecture, code reviews, and collaboration with business users/project management to ensure that technical solutions provide business value. Solutions predominantly target the .NET and Python/Django platforms.

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| ***Environment:*** | ***C#, ASP.NET, Python, Django, HTML, CSS, JavaScript, SQL Server, PostgreSQL, Windows Presentation Framework (WPF), Windows Communication Framework (WCF), PHP, Solr, MySql*** |  |

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| **TABcom, LLC** | **November, 2009 – May, 2011** |
| *Principal Architect* | (Remote Employee) Hazletown, PA |

Principal technical architect for the Technology group (12-18 developers/QA analysts). Responsible for establishment and governance of the company-wide architectural vision and technical direction of software development including development process/methodologies, standards, best practice implementation, technology/tool selection, and strategic development initiatives. Additional core responsibilities include enterprise and project-level architecture, design and implementation of software solutions, code reviews, and collaboration with business leadership to formulate technical solutions which support the business vision and meet evolving business needs. Also responsible for technical estimates, interviewing and evaluation of consultants/employees, mentoring of peer/junior developers, and light project management. Solutions predominantly target the .NET platform.

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| ***Environment:*** | ***C#, ASP.NET, Windows Communication Foundation (WCF), SQL Server, XHTML, JavaScript, CSS*** |

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| **JBS Custom Software Solutions** | **November, 2008 – October, 2009** |
| *Consultant* | (Remote Employee) Chadds Ford, PA |

Consultant, primarily responsible for the architecture, development, and deployment of custom software solutions for clients such as SanDisk and Guitar Center. Also responsible for the design and implementation of reusable services/components/ frameworks, project-level architecture, code reviews, and collaboration with business users/project management to ensure that technical solutions provide business value. Solutions predominantly target the .NET platform.

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| ***Environment:*** | ***C#, Silverlight, XAML, Windows Communication Foundation (WCF), SQL Server, XHTML, JavaScript, CSS*** |

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| **Harte-Hanks Direct** | **January, 2008 – October, 2008** |
| *Systems Architect* | Langhorne, PA |

Systems Architect for the architecture group (5 architects), serving multiple business units within the company as a project architect and technical leader. Responsible for leading and guiding project development teams, project-level architecture, code reviews, and collaboration with business users/project management to ensure that technical solutions provide business value. Also responsible for establishing team-level standards and practices for software development. Solutions predominantly targeted the ASP.NET platform.

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| ***Environment:*** | ***C#, ASP.NET MVC, jQuery, ASP.NET AJAX (Atlas), Windows Communication Foundation (WCF), ASP.NET Web Services, SQL Server, XHTML, JavaScript, CSS, XML, XML Schema, MSMQ*** |

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| **Rosetta Marketing** | **June, 2007 – December, 2007** |
| *Technical Architect* | Hamilton, NJ |

Technical architect for the Technology group (8-10 developers). Primarily responsible for the architecture and development of high-volume, public-facing websites for clients such as Allergan, Panasonic, and The American Management Association. Also responsible for helping to establish process and development standards, technical direction, strategic development initiatives, and the design/creation of reusable frameworks/services/components/tools for the group. Solutions predominantly target the ASP.NET platform.

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| ***Environment:*** | ***C#, ASP.NET, jQuery, ASP.NET AJAX (Atlas), Enterprise Library, SQL Server, Oracle, XHTML, JavaScript, CSS, XML, XML Schema*** |

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| **Bristol-Myers Squibb** | **May, 2004 – May, 2007** |
| *Lead Developer / Architect* | Princeton, NJ |

Lead developer and technical architect for the Enterprise Web Development group (12-15 developers). Responsible for establishing and guiding the architectural vision and technical direction of the group, including development methodologies, best practices, and standards. Also responsible for light project management, interviewing and evaluation of consultants/employees, mentoring of peer/junior developers, technical and user documentation, maintenance of legacy code, and end-user support. Solutions targeted a variety of platforms such as ASP.NET, Windows Forms, Tablet PC, SQL Server Reporting Services, Windows Mobile, Broadvision, and J2EE.

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| ***Environment:*** | ***C#, Windows Forms, ASP.NET, Oracle, XHTML, JavaScript, CSS, XML, XML Schema*** |

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| **Bristol-Myers Squibb (through KForce)** | **November, 2003 – April, 2004** |
| *Consultant* | Princeton, NJ |

Software development consultant for the Enterprise Web Development group. Responsibilities included architecture, design, and development of software, requirements gathering, technical and user documentation, and maintenance of legacy code.

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| ***Environment:*** | ***C#, Windows Forms, ASP.NET, Oracle, XHTML, JavaScript, CSS, XML, XML Schema*** |

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| **MicroWarehouse** | **October, 2002 – October, 2003** |
| *Senior Developer* | Lakewood, NJ |

Senior developer for the Marketing Intelligence group. Architected and developed systems across many areas of the business, including the e-commerce website, internal support tools, the data warehouse, and legacy systems integration.

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| ***Environment:*** | | ***C#, ASP.NET, SQL Server, HTML/DHTML, JavaScript, CSS, XML, XML Schema, XSLT*** | |
| **Spencer Gifts** | | **February, 2001 – September, 2002** |
| *Software Engineer* | | Egg Harbor Twp, NJ |

Lead developer for Microsoft technologies. Responsible for development, determination/application of best practices and design, maintenance of legacy code, authoring technical and user documentation, mentoring of peer developers, and providing end-user support.

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| ***Environment:*** | | ***Visual Basic 6, Visual Basic.NET, ASP, ASP.NET, HTML/DHTML, JavaScript, XML, XML Schema, XSLT, Oracle, DB2, SQL Server*** | |
| **ACS Birch & Davis** | | **September, 1999 – January, 2001** |
| *Senior Software Engineer* | | Trenton, NJ |

Lead developer for the New Jersey KidCare/FamilyCare system. Responsible for development, project management, supervision of contract developers, and the design of technical and end-user documentation.

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| ***Environment:*** | ***Visual Basic 6, Microsoft Access, Oracle*** |

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| **ACS Birch & Davis (through Hi-Tec Systems)** | **September, 1998 – August, 1999** |
| *Consultant* | Trenton, NJ |

Software development consultant for the NJ KidCare/FamilyCare system. Involved in development and end-user support.

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| ***Environment:*** | ***Visual Basic 6, Microsoft Access, Oracle*** |

**CREDITS, HONORS, AND AWARDS**

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| **Title Credits**   * Halo 5: Guardians * Halo 5: Forge * Halo: The Master Chief Collection |  |
| * Halo: Spartan Strike |  |
| * Halo Channel |  |

**Special Thanks**

* Gears of War: Ultimate Edition (as 343 Industries Services Team)
* Gears of War 4 (as 343 Section 3 Services Team)

**EDUCATION**

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| **Stockton University** | **September, 1993 – December, 1998** |
| Bachelor of Science in Computer Science | Pomona, NJ |