# Joel Verhagen

[github.com/joelverhagen](github.com/joelverhagen)

Seattle, Washington
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## TECHNICAL SKILLS

**Programming languages (proficient):** C#/.NET, T-SQL, JavaScript/TypeScript, HTML, CSS

**Data technologies:** SQL Server, Azure Storage, Azure Cosmos DB, Azure Data Explorer (Kusto)

**Cloud computing:** Azure – Storage, Service Bus, Search, SQL, Websites, Functions, ARM, VMs

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## WORK EXPERIENCE

### Principal Software Engineering Manager
**Microsoft Corp.** – NuGet, Visual Studio team
Jun. 2021 – present

- Oversaw day-to-day operations of nuget.org as the engineering manager and technical lead
- Designed, implemented, and drove adoption of a NuGet package metadata analyzer (github.com/NuGet/Insights)
- Collaborated with a partner package repository to design and begin implementation of a unified package platform

### Software Engineer I, II, Senior Software Engineer
**Microsoft Corp.** – NuGet, Visual Studio team
Oct. 2015 – Jun. 2021

- Drove nuget.org response for the "dependency confusion" package management attack
- Optimized validation and publishing pipelines to nuget.org, improving ingestion time by ~50%
- Designed and implemented a re-architectured nuget.org package search using Azure Search, measured success
- Helped design and implement package signature validation on nuget.org and designed repository signing
- Documented NuGet HTTP protocol for public facing documentation website, enabling custom NuGet software
- Designed and helped implement asynchronous validation of packages
- Drove nuget.org redesign website to be fully accessible and have a fresh look
- Implemented .NET Standard framework compatibilities in NuGet client

### Software Engineer I
**Microsoft Corp.** – Commerce Platform
May 2014 – Oct. 2015

- Maintained and improved paginated event store built on .NET and SQL Server
- Implemented generic REST endpoint which allows callers to efficiently poll for resource changes
- Implemented notification system built on .NET, SQL Server, and Azure Service Bus

### Software Development Engineer Intern
**Microsoft Corp.** – Commerce Platform
May – Aug. 2013

- Worked on the order management system for Microsoft's internal commerce platform

### Applications Developer Intern
**Space Exploration Technologies Corp.** – IT
Jan. – May 2013

- Designed and developed an in-browser tool to edit sensor calibration files for the flight software (C# + MVC 4)

### Software Development Engineer in Test (SDET) Intern
**Microsoft Corp.** – Blend, Visual Studio team
Mar. – Jun. 2012

- Wrote and debugged automated test cases in C# for Blend for Visual Studio (formerly Expression Blend)

### Development Intern
**Seapine Software, Inc.**
Spring 2011, Fall 2011

- Worked on developing multi-platform bug tracking software in C++

### Engineering Intern
**ShareThis, Inc.**
Summer 2008, Summer 2009

- Designed, developed, and deployed the ShareThis Firefox add-on (nearly 250,000 users)

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## EDUCATION

### B.S. in Computer Science
University of Cincinnati (Cincinnati, Ohio)
Sep. 2009 – May 2014

- Dean's list with **3.850 GPA**
- Completed a **Math Minor**