

Stephen Halter

halter73@gmail.com · stephenhalter.com · github.com/halter73

Experience

Principal Software Engineer

Microsoft 2012–Present

14 years on the ASP.NET and .NET platform teams, progressing from individual contributor to technical lead for increasingly large parts of the framework.

Minimal APIs & modern .NET hosting. Created the Minimal APIs framework, which became the default programming model for new ASP.NET Core applications starting with .NET 6. This was a cross-team initiative: I worked with the C# language team to enable necessary language features, contributed new hosting APIs to the .NET runtime, updated all project templates, and conducted user research with developers from Java, Node.js, Python, Ruby, and PHP ecosystems to validate the design.

Kestrel web server. One of the primary developers of Kestrel, ASP.NET Core's HTTP server. Implemented HTTP/2 protocol support, HTTPS, connection lifecycle management, and rate-limiting infrastructure that later proved critical for coordinated CVE mitigations. Over 800 commits and 450+ merged PRs across the Kestrel codebase.

ASP.NET SignalR. Core developer on the original ASP.NET SignalR real-time framework from its early days. Worked across the transport layer, scale-out backplane, authorization, and client libraries for .NET, JavaScript, and mobile platforms.

.NET dependency injection. Helped build the dependency injection framework that ships with .NET and is used by ASP.NET Core, Entity Framework, and the broader ecosystem.

Identity & authentication. Created the built-in Identity API endpoints for .NET 8, giving ASP.NET Core its first token-based authentication story without requiring third-party identity servers.

Model Context Protocol. Primary contributor and maintainer of the official MCP C# SDK, implementing protocol features, transport modes, and the middleware pipeline.

Cross-cutting. Reviewed 1,800+ pull requests across ASP.NET Core. Participated in 279 .NET API design reviews. Filed 665+ issues. Contributed across the .NET runtime, extensions, and Entity Framework repositories. Participated in coordinated security disclosures and authored documentation.

Software Engineer Intern

Microsoft Summer 2011

ASP.NET team. Built developer tooling for Visual Studio.

Software Engineer Intern

Rosetta Summer 2010

Built Azure-hosted ASP.NET web applications. Sole back-end developer at launch for a consumer-facing product.

Education

The Ohio State University

B.S. Computer Science & Engineering, 2012