

TARIK BROWN

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(904) 874-4457

EDUCATION

University of Washington (Evans School)

Seattle, WA (Graduation Date: June 2028)

- Part-Time Master of Public Administration

University of Notre Dame

Notre Dame, IN (May 2022)

- Bachelor of Science in Computer Science – Minor: Public Policy

EXPERIENCE

Microsoft – Visual C++ Team, DevDiv OS Tech Team

Software Engineer II - Level 61

Redmond, WA (August 2022 - Present)

- Drove cross-functional support for the Azure Sphere Embedded Device Team at Microsoft
 - Developed and productionized a robust Python module for asynchronous communication with Azure Sphere devices, enabling non-blocking CLI and socket-based testing workflows.
 - This module—now adopted by the Azure Sphere Team—leverages asyncio patterns for resource safety and reliability, includes comprehensive test coverage, and has replaced synchronous testing patterns, resulting in fewer test failures.
 - Mentored a junior engineer and onboarded them to support these efforts, successfully leading them to complete a migration of the Azure Sphere Visual Studio Extension—including establishing new CI/CD pipelines and writing unit tests.
- Led the development of the integration of various Valgrind features within Visual Studio for Remote Linux Development while mentoring a junior engineer.
 - Designed and implemented integrated Valgrind diagnostic support in Visual Studio's Remote Linux tooling by parsing Valgrind XML output.
 - Engineered robust error extraction, UI surfacing, and actionable suggestions for C++ memory diagnostics, used by internal and external developers.
 - Designed sub-tasks for the junior engineer working on this project to contribute the Valgrind improvements.
- Led the launch of key features for the VS Code C++ Extension, driving end-to-end development and cross-team collaboration.
 - Developed the "Add Missing Include" Code Action for C++ IntelliSense.
 - Added support for Markdown in C++ Doxygen comments.
 - Developed a new compiler acquisition system and created a tutorial video to promote it. This video has over 500k views on the official VS Code YouTube channel (search: "Installing MinGW to build C++ Code on Windows by Visual Studio Code").
 - Resolved over 100 user issues, including bugs and feature requests.

HONORS AND AWARDS

2021 Truman Scholar — Awarded by the Harry S. Truman Scholarship Foundation. Highly selective, presented annually to about 60 college juniors nationwide for outstanding leadership, academic achievement, and commitment to public service. Includes \$30,000 for graduate study and leadership development.

More Information: [Notre Dame News Article](#)

SOFTWARE AND TOOLING

Programming Languages Python, C, C++, C#, TypeScript, JavaScript, HTML, CSS, Swift

Software & Tools Visual Studio, Visual Studio Code, Azure DevOps, GitHub, Unreal Engine 5