

Derrick Stolee – <https://stolee.dev> – stolee@gmail.com – 402-309-9932
Software Engineer. I solve hard problems. I write a lot of good code and help others write better code.

Professional Contributions

I believe my body of work speaks volumes. Not only can I produce high-impact work, I can communicate it to a wide audience. Please see these blog posts and their corresponding open-source contributions.

Professional Blog Articles

[Supercharging the Git Commit Graph](#)
[Bring your monorepo down to size with sparse-checkout](#)
[Updates to the Git Commit Graph Feature](#)
[Exploring new frontiers for Git push performance](#)
[Introducing Scalar: Git at Scale for Everyone](#)

Open Source Contributions

[Git's commit-graph feature](#)
[Sparse-checkout builtin and fast matching](#)
[Extremely fast topo-order algorithm¹](#)
[Git's pack.useSparse feature](#)
[Refactored VFS for Git into Scalar](#)

I have significant experience working with a team and across team and company boundaries. I know how to demonstrate why my contributions are valuable and correct, as evidenced by my substantial contributions to Git. As part of supporting the Windows OS repository and Office repository in their transitions to Git, I have worked across team boundaries to identify pain points and resolve them quickly. By fully understanding a complicated system with many pieces, I led the creation of [Scalar](#), a significant refactor and renewed architecture of VFS for Git to use Git's sparse-checkout feature instead of a virtualized filesystem.

Professional Experience

Microsoft Corporation December 2015 – Present

- Principal Software Engineer: September 2019 – Present
- Senior Software Engineer: February 2017 – September 2019²
- Software Engineer II: December 2015 – February 2017

Starting on the back-end Git server for Azure DevOps, I helped scale the service to handle the Windows OS repository. I then switched to a team focused on the Git client experience.

Iowa State University, Ames, IA. September 2013 – December 2015

- Assistant Professor, Mathematics and Computer Science: September 2013 – December 2015

As a research mathematician working in *computational graph theory and combinatorics*, I solved theoretical math problems using algorithms and high-performance computing.

This section of my experience includes graduate and postdoctoral research and teaching experience, so is omitted.

Education

University of Nebraska—Lincoln

- Ph.D. Mathematics and Computer Science, May 2012
- M.S. Mathematics, December 2009
- B.S. Mathematics and Computer Science, May 2007
 - o Part of [Jeffrey S. Raikes School of Computer Science and Management](#)

¹ This one is my favorite Git contribution and is the longest commit message I've ever written.

² Note the very short time interval at this rank.