Dmitriy Shepelev

ph.ds@outlook.com dshepelev.com
linkedin.com/in/dmitriyshepelev github.com/DmitriyShepelev
503-737-8862

EDUCATION

University of Washington — Seattle, WA | Graduated: June 2022

- B.S. Computer Science (Direct Admission): *cum laude* (3.90 GPA)

TECHNICAL SKILLS

- C#, .NET, Java, SQL, C, C++, JavaScript
- Bash, Git, GitLab, AWS, Microsoft Azure, Agile

WORK EXPERIENCE

Software Engineer II – Microsoft Corporation | September 2024 – Present | Remote

- Created tool to install Visual Studio in CloudBuild, thus expanding build tool support to **1000+** repositories

Software Engineer – Microsoft Corporation | August 2022 – September 2024 | Remote

- Enabled CloudBuild to build repositories using **more performant** dotnet.exe
- Enabled CloudBuild to **reuse** hashes from copied files for caching, thus **reducing** build time
- Helped **parallelize** builds for projects targeting multiple frameworks to **reduce** build time by **25%**
- Refactored code to eliminate extraneous file access-tracking process creation on hot code path
- Integrated CloudBuild with AnyBuild to **reduce** build time by **57%** for C++ repositories
- Developed plugins onboarding 1/3 of legacy build system repositories to build correctness & performance features
- Implemented an MSBuild evaluation cache to **reduce** build disk space & scheduling time
- Prototyped file access reporting API for C#/VB compiler & MSBuild to obtain shared compiler server file accesses
- Expanded support for shared compilation server to majority of internal repositories, **reducing** build time by up to **60%**
- Modified CloudBuild build scheduler algorithm to **reduce** machine idling time by **35%**

Software Development Engineer Intern – Amazon Web Services | June 2021 – September 2021 | Seattle, WA

- Developed a generic HTTP handler in **Java** that enables dynamic support of AWS IoT services' HTTP APIs
- Generic HTTP handler will save AWS engineers 2+ months of work **for each** HTTP API needing support

Undergraduate Research Assistant – University of Washington PLSE Group | June 2020 – September 2020 | Seattle, WA

- Found & fixed bugs in the Checker Framework, which extends the Java type checker to catch more bugs
- Used the Checker Framework to analyze signedness errors in GitHub repositories with unsigned arithmetic

TA for CSE 331: Software Design & Implementation – University of Washington | March 2020 – August 2020 | Seattle, WA

- Led & taught a 30-person section using active learning techniques, such as interactive worksheets
- Received a 4.7/5.0 instructor rating from students

Engineering Intern – Collins Aerospace (formerly Rockwell Collins) | June 2017 – August 2017 | Wilsonville, OR

- Pioneered a linear algebraic algorithm for a technology that will automatically align Heads-Up Displays' boresights
- Technology will save $500k+ for airlines who currently use expensive machinery for boresight alignment
- Presented my work to 50+ students, mentors, & community members in a symposium at the University of Portland

PROJECTS

- Systems Programming: built a search engine for static content & webpages in **C** & **C++**
- Dis' Systems: built a sharded, linearizable, highly available key-value store with atomic multi-key transactions in **Java**
- Software Design: built a GUI in **Java** & **React** that finds paths between UW buildings using a campus map & MVC
- Web Programming: built an ecommerce website for users to buy items using **JavaScript**, **HTML**, **CSS**, & **SQLite**