

# JOHN DOTY

2026 E Louisa St, Seattle WA 98112

john@d0ty.me • <http://friendlyhedgehog.com/>

---

## OBJECTIVE

Work with talented people to write extraordinary code, watch it run, and use it to make people happy.

---

## EDUCATION

**Carnegie Mellon University** Pittsburgh, PA, U.S.A. • Bachelor of Science in Computer Science, 1999

---

## SELECTED WORK

### **Lacework** (2022-)

#### ***Software Engineer (E7)***

- Built automation to shift development from laptops and shared clusters to remote environments and on-demand clusters.
- Built custom development tools for security researchers that reduce the development time for new detection rules while improving their quality.

### **Facebook - Warm Storage** (2017-2022)

#### ***Software Engineer (E7)***

- Tech lead for team responsible for the metadata for Facebook's hyperscale (multi-exabyte) distributed file system. Designed, implemented, and rolled-out the migration from a single-machine, in-memory directory database to a horizontally scalable one.

### **Facebook - Metric and Dimension Foundry** (2016-2017)

#### ***Software Engineer***

- Designed a company-wide system for defining and materializing auditable metrics and dimensions across Facebook's data warehouse. The system included a repository for discovering metrics and dimensions, rich metadata for defining contact information, revision history, a custom SQL dialect, and data quality checks.

### **Microsoft - Windows Store** (2014-2016)

#### ***Partner Architect***

- Designed and implemented the client-side licensing application licensing system in Windows 10.

### **Microsoft - Xbox Live Commercial Services** (2011-2014)

#### ***Partner Architect***

- Designed and implemented the content licensing service for the Xbox One, responsible for enforcing content access policy for games and movies on the Xbox.

### **Microsoft - Incubation (Codenames 'Ultra'/'Oz'/'Oslo')** (2007-2011)

#### ***Principal Software Development Engineer***

- Did exploratory work in areas related to building declarative apps, including software componentization, change notifications, data-binding, and data-flow systems.
- Architected several revisions of the compiler for the 'M' data modeling language, including a command line compiler, deployment tools, and Visual Studio language support with auto completion and real-time static analysis.

### **Microsoft - Distributed Transaction Coordinator** (2005-2007)

#### ***Senior Software Development Engineer***

- Assisted in the development of the 'System.Transactions' namespace of the .NET Framework, including lightweight transactions and promotable, single-phase transactions.
- Added support for running the Distributed Transaction Coordinator in Active-Active cluster configurations.

### **Microsoft - COM/DCOM/COM+** (1999-2004)

#### ***Software Development Engineer***

- Maintained and enhanced COM, DCOM, and COM+, from Windows 2000 through Windows Server 2003.
- Assisted in the implementation of application compatibility hooks, which allowed Windows 95-era apps to run on Windows XP.

---

## SKILLS

- Exceptional at learning and debugging new and unfamiliar systems
- Have written more than 1 Mloc in C#, C, and C++
- Have written more than 100 Kloc in Python
- Have written more than 10 Kloc in Clojure, Javascript, Typescript, and Rust
- Have written a small amount of Go, Lisp, HLSL, and Ruby
- Familiarity with a wide variety of build and version control systems (make, msbuild, bazel, buck, git, mercurial, svn, perforce, &c.)