

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 Sci., 1999

WORK HISTORY

Microsoft - Windows Store (2014-)

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 was primary implementor on a secure payment gateway usable by third parties. The payment gateway can accept payment from a user for a good without knowing anything about the good being sold. (It is used, e.g., by UFC to sell pay-per-view fights on the Xbox 360.)
- Enhanced the Xbox Live user account service to allow users to change the effective country of their account.
- Assisted with the modernization of the existing Xbox Live services, by adapting the deployment system to move them from running on explicitly managed servers running IIS to more dynamic virtual machines.
- Designed and was primary implementor on the content licensing service for the Xbox One, responsible for enforcing content access policy for games and movies on the Xbox.
- Assisted with the client-side implementation of the licensing policy, as well as the lifetime management of processes on the XBox One.

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.
- Prototyped general-purpose XAML processing components, which eventually became the basis of the 'System.Xaml' namespace in the .NET Framework.
- Acted as the chief implementation architect on 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.)
- Assisted in the development of the language and tools that eventually became Microsoft Power Query.

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.
- Maintained and enhanced the Transaction Manager's support for XA and the TIP protocol.
- Added support for running the Distributed Transaction Coordinator in Active-Active cluster configurations.
- Designed and implemented an object model over a transactional write-ahead log, making it easier to implement transactional resource managers.
- Assisted with the implementation of the WS-AT transaction protocol and its integration into the transaction manager and the rest of the programming model.

Microsoft - Codename 'Indigo' (Windows Communication Foundation) (2004-2005)

Software Development Engineer

- Prototyped a process activation, lifetime, and hosting model for services written with WCF.

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

Software Development Engineer

- Maintained and enhanced COM, DCOM, and COM+, from Windows 2000 through Windows Server 2003.
- Designed and implemented support for COM+ applications running as Windows Services.
- Assisted in the implementation of lightweight interface proxy/stub objects for COM.
- Assisted in the implementation of application compatibility hooks, which allowed Windows 95-era apps to run on Windows XP.
- Designed and implemented runtime application verification hooks for COM and COM+ applications.

SKILLS

- Have written more than 1 Mloc in C# and C
- Have written more than 100 Kloc in C++
- Have written more than 10 Kloc in Python and Go
- Have written a small amount of Lisp, Ruby, and Javascript
- Can follow along with Objective C, Scheme, ML, Haskell, Erlang, and HLSL
- General familiarity with various build and management systems (nmake, gmake, ant, msbuild, git, svn, perforce, &c.)