Bob Summerwill

Senior Software Engineer and Architect
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Senior software engineer and architect with 22+ years of professional development experience, spanning PC, consoles and mobile platforms and server-side Linux.

3.5 years at the heart of the Ethereum ecosystem, with key roles at Ethereum Foundation, ConsenSys and Enterprise Ethereum Alliance. Public speaker and bridge builder.

Stood for Hyperledger TSC in August 2018 after two years of support.

Shipped 20 AAA products at Electronic Arts for 9 platforms, on billion dollar projects.

Bob has been working at the heart of the Ethereum ecosystem since mid 2015.   His work on Ethereum started independently - adding ARM Linux cross-builds for the cpp-ethereum client to bring Ethereum to mobile and wearable Linux.   That community involvement led to a full-time role at the Ethereum Foundation and then a move to ConsenSys and a pivotal role in the creation of the Enterprise Ethereum Alliance.   He served as Vice-Chair on the EEA Technical Steering Committee. Bob has also been engaged with Hyperledger since 2016 and stood for election to the Hyperledger TSC in August 2018.

Bob previously worked at TD Securities in Toronto in 2015, leading their DevOps, tooling and OpenStack cloud migration initiatives worldwide as a key member of a new Agile Transformation team.   While there he organized the first ever DevOps for Banks Meetup in Toronto.

Shipped 20 AAA products at EA across 9 platforms.   Shipped 6 FIFA products. That is now a $1B+ dollar business.   Generalist with deep knowledge of architecture, configuration management and testing.

Broad technical interests, spanning from wearables, mobile and games to cloud, web, virtualization, containerization, VR and AR. Platform and framework development are of particular interest. Always learning. Shipped the first Mono (.NET) runtime for the Tizen OS in 2014. Loving open source participation.

Target platforms - Products shipped for PC (Win95, Win98, Vista, XP, Win7), PS1, PS2, PS3, PS4, XBOX, XBOX360, XBOX One and GameCube. Currently developing for iOS, Android, Tizen and Sailfish, Windows Server 2012 and RHEL 6.5.

Host platforms - Windows, OS X and Linux.

Languages - Majority of experience using C++ (20+ years experience) with plenty of C# and Python too. Has also used Java, Objective-C, Perl and Ruby professionally. Many other languages for fun.

Development tools - Visual Studio, Unity3D, MonoDevelop, xcode, Eclipse, VC++, GCC, Clang, NAnt, Ant, MSBuild, make, Perforce, Git, Github, SourceTree, Jenkins, JIRA, Confluence, Bitbucket, Hansoft, DevTrack, PC-lint, Understand for C++, Lattix, ANTLR, and many more. Admin expertise with Atlassian tools and Perforce.

Personal - http://www.linkedin.com/in/bobsummerwill | http://bobsummerwill.com | http://twitter.com/bobsummerwill | http://github.com/bobsummerwill
Company - https://varro.tech
Projects - https://github.com/doublethinkco/cpp-ethereum-cross | https://github.com/ethereum/aleth | https://kitsilanosoftware.github.io/MonoTizen/

Experience

Self Employed
May 2014 - Present (4+ years)

- Full-time contact with Quantfury as Blockchain Lead
- Full-time contract with Sweetbridge as Principal Dev, then Community Ambassador
- Full-time contract with ConsenSys as Lead Architect, EEA
- Full-time contract with Ethereum Foundation as C++ Developer
- Full-time contract with TD Securities as DevOps Solutions Architect
- Full-time contract with Sony Computer Entertainment America in February/March 2014
- Full-time contract at DeNA from October to December 2014, prototyping future titles
- Porting Ethereum to mobile Linux - http://doublethink.co/ethereum-light-client/
- Porting Mono to Sailfish OS - http://kitsilanosoftware.github.io/MonoForSailfish/
- Porting Mono to Tizen OS - http://kitsilanosoftware.github.io/MonoTizen/

- Commodore 64 emulator for the Gear 2 smartwatch - https://wearablec64.wordpress.com/

Community Leader, Ethereum Project
January 2016 - present (2+ years)

- Informal leadership role within the Ethereum project for many years, both before and after my time at the Ethereum Foundation.
- This has involved a lot of public speaking, especially in 2018 (https://varro.tech/), with a lot of bridge-building to bring together the fragmented blockchain sub-communities.
- Also a Community Ambassador for CryptoChicks, a non-profit educational hub working to provide professional development and leadership opportunities for women in blockchain.

Blockchain Lead - Quantfury
June 2018 - present (4 months)

- Leading design of blockchain elements of Quantfury mobile trading application.
- Architectural design, white paper, analysis of technology options, bringing suitable advisors.
- https://quantfury.com/

Principal Developer, Community Ambassador
Sweetbridge
October 2017 - May 2018 (7 months)

- Joined Sweetbridge as Principal Developer to work on development team.
- But found myself building alliances and being technical spokesperson almost immediately, so transitioned to a Community Ambassador role.
- Spoke on Analysis in Chains, Epicenter, Coindesk LIVE on Consensus, London Meetup
- Community engagement and bridging technical, business and community audiences.

Lead Architect, EEA - ConsenSys
October 2016 - October 2017 (1 year)

- Joined ConsenSys from the Ethereum Foundation specifically to work on the formation of the Enterprise Ethereum Alliance
- Continuation of the efforts which I had started within the Ethereum Foundation to build bridges with enterprise.
- Vice-chair, Technical Steering Committee, EEA
- https://entethalliance.atlassian.net/wiki/display/TSC/2017/07/12/Rebooting+the+Technical+Steering+Committee
- Lots of cat-herding and social glue activities.
- Speaker at the EEA launch event and at Consensus 2017 conference.

C++ Developer, Ethereum Foundation
February 2016 - October 2016 (8 months)

- Was approached by the Ethereum Foundation to work on the cpp-ethereum client following several months of volunteering on the project.
- Managed releases
  - https://github.com/bobsummerwill/cpp-ethereum/releases/tag/v1.3.0
    - https://blog.ethereum.org/2016/07/08/c-dev-update-summer-edition/
  - https://github.com/ethereum/webthree-umbrella/releases/tag/v1.2.9
  - https://github.com/ethereum/webthree-umbrella/releases/tag/v1.2.8
  - https://github.com/ethereum/webthree-umbrella/releases/tag/v1.2.7
  - https://github.com/ethereum/webthree-umbrella/releases/tag/v1.2.6
- Worked on C++ re-licensing and provenance paperwork for contributors
  - https://bobsummerwill.com/2016/07/12/ethereum-everywhere/
  - https://doublethink.co/2015/11/30/first-working-ethereum-c-cross-builds/
- Major architectural rework, splitting apart UI from core and tools.
- Built new automation system (TravisCI, Appveyor, Homebrew, PPAs)
- Effort to bring Ethereum into Hyperledger banner and building bridges
- Major contributor to Homestead Docs (http://www.ethdocs.org/)
- https://github.com/ethereum/homestead-guide/graphs/contributors
- https://github.com/ethereum/cpp-ethereum/graphs/contributors
- See blogs at https://doublethink.co/
- Cross-builds support prior to EF at https://github.com/doublethinkco/cpp-ethereum-cross

DevOps Solutions Architect - TD Securities (TD Bank Financial Group)
April 2015 - October 2015 (6 months)

- Leading DevOps, tooling and OpenStack cloud migration initiatives for TD Securities worldwide (Toronto, New York, London, Singapore) as a key member of a new Agile Transformation team.
- Recently organized the first ever [DevOps for Banks](#) Meetup in Toronto.
- Lieutenant within TD Securities for [TD Cloud](#) migration.   Power user and front-line support for application teams within TD Securities.
- Brought up full Atlassian stack (JIRA, Confluence, Bitbucket and Crowd) hosted on that OpenStack cloud.

Senior Software Engineer - Roadhouse Interactive
June 2014 - September 2014 (4 months)

- Building a Unity3D mobile game for iOS and Android for Bandai Namco
- Implemented transparent asset bundle loading system
- Putting automated server deployment and automated testing frameworks in place

Multiple Roles - Electronic Arts
January 1999 - May 2014 (15+ years)

Senior Software Engineer (UFC/NHL)
September 2012 - May 2014 (1 year 9 months)
- Acquired mobile experience working on an unannounced future Android and iOS title for about 8 months.
- Building tools and web pages to help with cross-team integration and sharing.
- Work on visualizing and improving our Perforce Stream flow.
- General systems work on UFC PS4/XBOX360.

EA Sports Label Software Architect
March 2012 - August 2012 (6 months)
- Appointed as the first dedicated Architect for EA Sports as a whole, reporting directly to the CTO

- Leader of the new Architectural Council, which was working towards a cohesive architecture across all EA Sports titles, and towards codebase convergence. Bringing the experience of the "Wireframe" framework to the Sports Label as a whole. This initiative was superseded by "EA Sports Ignite"

Software Engineer III / Senior Software Engineer (SSX/UFC/NHL)
January 2011 - February 2012 (1 year 2 months)
- Architect for "Wireframe 2.0" framework used for NHL and UFC. Layered architecture composed entirely of versioned packages with clean split between technology and game-specific code. Worked across 3 platforms, split into 10 domain-specific DLLs (rendering, online, gameplay, etc). 12 months of development.
- Also working as Architect for the UFC/NHL/SSX development group as a whole during this period
- Built scripts to create a "Perfect Perforce Mirror" to replicate content from one server to another with perfect replication of integration history, dates, users, etc. on a per-changelist basis. This was used to consolidate multiple servers, bringing 3 years worth of history for NHL over to a new shared server, with full history.
- Designed and oversaw development of a Perforce account administration script which syncs permissions and groups defined in text-files to the server, so we have full history of all permissions changes, and so that administration can be delegated to non-super-users on a per-project basis. That included "hiding" repositories and all permissions associated with those for NDA enforcement.

Software Engineer III (EA Canada)
May 2009 - December 2010 (1 year 8 months)
- Designed TechTracker tool which was used to comprehend technology use, drift and technical debt across EA Sports, covering 30+ workspaces and 1000+ packages. Working on a technology alignment initiative under the direction of the studio CTO.

Software Engineer III (FIFA)
August 2007 - May 2009 (1 year 10 months)
- Technology alignment work, including involvement in a sports-wide initiative to align on rendering technology.
- Major refactoring of FIFA prior to FIFA12 product year, moving the code into a layered, acyclic architecture, with DLLs for various of the components. Build system changes to "hide" implementation packages when building particular components. Using Understand for C++ and Lattix for code-comprehension.
- Kickstarted the product work on FIFA PC - the continuation of the advance work into production through to Alpha.
- Worked on the first FIFA Ultimate Team title, and subsequently on DLL-izing that feature.
- Technical Director for new FIFA Advance Team for a few months before reverting to SE role. Getting the PS3/XBOX360 codebase working on PC again. Ported UI technology.

Software Engineer II/III (EATech - worldwide central technology)
May 2005 - August 2007 (2 years 4 months)
- Technical lead for Configuration Management technologies at EATech (worldwide central technology group) for around 2 years, supporting code build technology used by all teams and studios.
- Designed and built key technology and testing infrastructure for the RenderWare Modularization Project where we split the RenderWare monolith up into ~60 components and converted from a makefile system and installer to individual source-code released based on the EA packaging system. There was a huge testing matrix and strong backwards-compatibility requirements.

Software Engineer I/II (FIFA)
January 2003 - April 2005 (2 years 4 months)
- Technical lead for Configuration Management group which grew organically from FIFA06 to cover the entire EA Canada studio in just under a year during and slightly after XBOX360 transition year. Built SLN generation tools, patching utilities, automated build systems and various other infrastructure to support the platform transition.
- Online Lead SE for FIFA05, the first version to use XBOX LIVE. Also migrated the mishmash of VCPROJ, makefiles and makefile generation processes into a single cross-platform NAnt based code build system.
- Designed and oversaw development of "nantToVSTools" which is a VCPROJ/SLN generation system based on the existing NAnt build scripts. That workflow is now used by the whole company. It was originally implemented so that we could have full IDE integration and leverage IncrediBuild, while retaining a cross-platform build definition language.
- Led SourceSafe to Perforce transition for FIFA 2004. Revamped all automated build and testing systems and disk-generation pipeline.

Programmer II/III (EAUK)
January 1999 - December 2002 (4 years)
- Built the parser and runtime for custom scripting language used on Harry Potter and the Chamber of Secrets PS2 (using Antlr), with runtime bytecode interpreter. Programming work for cut-scenes.
- Programmer on two soccer management titles. Merged two entirely independent PC codebases - a soccer management front-end and the FIFA arcade backend. Work on stadium building pipeline.

Programmer at Sony Psygnosis
June 1996 - December 1998 (2 years 7 months)
- PC and PlayStation development, most of which was on a title which was cancelled.

Discography

- Roadhouse/Bandai Namco mobile game using Unity3D (iOS, Android)
- **EA Sports UFC Mobile (iOS, Android)**
- **NHL15 (PS4, XBOX One)**
- **EA Sports UFC (PS4, XBOX One)**
- **NHL14 (PS3, XBOX360)**
- **NHL13 (PS3, XBOX360)**
- **FIFA 12 (PC, PS3, XBOX360)**
- **FIFA 11 (PC, PS3, XBOX360)**
- **FIFA 10, FIFA 10 Ultimate Team (PC, PS3, XBOX360)**
- **FIFA 09, FIFA 09 Ultimate Team (PS3, XBOX360)**
- NASCAR 08 (PS2, PS3, XBOX360) - Central technology role
- FIFA 07 (XBOX360) - Central technology role
- Skate (PS3, XBOX360) - Central technology role
- **FIFA 06 Road to World Cup (XBOX360 launch title)**
- **NBA LIVE 06 (XBOX360 launch title)**
- **FIFA 05 (PC, PS2, XBOX, GC)**
- **FIFA 04 (PC, PS2, XBOX, GC)**
- **Harry Potter and the Chamber of Secrets (PS2)**
- **Premier League Football Manager 2001 (PC)**
- **Premier League Football Manager 2000 (PC)**
- Prophecy (PC) - Project cancelled
- **Global Domination (PS1)**

Education

Leeds University - BSc Computer Science with Artificial Intelligence, 1993 - 1996