Arthur O'Dwyer

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Professional software engineer with 10+ years of work experience in C, C++, and Python. Keen on low-level C/C++ platform and library design and C++ evangelism.

Work Experience

| Systems engineer, then senior SRE, Mixpanel | C++11, Python | October 2014— |
|--|---------------|--------------------|
| · Event analytics service spanning 1100 machines in 7 datacenters | | |
| · Planned and executed the combining of separate datastores for events and user profiles | | |
| · Member of on-call team; ran incident postmortems | | |
| · Implemented C++ libraries for logging and JSON parsing/printing | | |
| Senior software engineer, MemSQL | C++11 | Jul 2013-Sep 2014 |
| · Distributed, lock-free, in-memory database compiling SQL to C++1 | 1 | |
| · Designed and implemented MemSQL's JSON column type | | |
| · Implemented a random SQL query generator in Python | | |
| · Reduced CMake build times from 1 minute to 1.5 seconds | | |
| Software engineer, Push Computing (acquired by MobileIron) | C++11 | Apr 2012–Jul 2013 |
| · iOS mobile device management | | |
| · Used Objective-C 2.0 (ARC) and C++11 in a production environment | | |
| · Wrote and released the N-way diff utility difdef under an MIT license | | |
| Designer, Colossal Cave: The Board Game | English | Nov 2010–July 2012 |
| · Published with \$15,000 raised from backers on Kickstarter | | |
| Contractor, ReadThrough.com | PHP | Sep 2011–Apr 2012 |
| · Web backend to parse screenplays in several industry formats | | |
| Systems software engineer, compiler team, Green Hills Software | C++ | Aug 2006–Mar 2011 |
| · Toolchain: Added end-to-end support for Unicode and x86-64 | | |
| · Front-end: Added over 40 new diagnostics; upgraded to EDG 3.10 | | |
| · Linker: Maintained Green Hills' optimizing ELF linker and reverse inliner | | |
| · Testing: Automatic generation and reduction of test cases | | |
| Intern, Microsoft Visual Studio Tools division | C # | summer 2005 |
| Intern, Spatial Integrated Systems | Matlab | summers 2003, 2004 |
| Junior member, Robocup (CMU's AIBO soccer team) | C++ | 2002–2003 |
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Education

Carnegie Mellon University: University Honors, Phi Beta Kappa

May 2006

· Dual B.S. in mathematical science and computer science

Other Skills

Expert knowledge of C++. **Showrunner of the San Francisco C**++ **meetup.** Attended the Oct 2015 meeting of the ISO C++ Committee. Have spoken at CppCon 2014–2016 and C++Now 2015

Deep knowledge of C, Python, Make, and CMake. Familiarity with **assembly languages** including PowerPC, ARM, MIPS, and x86-64. Numerous other programming languages, including Objective-C, SQL, Perl, METAFONT, Fortran, Inform, and Befunge

Deep knowledge of the Green Hills toolchain, MISRA coding standards, and Mixpanel's API

Euro gamer. Expert juggler and club passer. Adventurer Grandmaster. Life Scout; Order of the Arrow