Craig Hobbs

7051 Alonzo Ave NW
Seattle, WA 98117
206-790-1246
craigahobbs@gmail.com

Software Development Leader

Experienced software development manager and software developer with a passion for building effective software teams and systems.

- 15 years experience managing software development teams

- 20 years C/C++ software development experience

- 10 years Python software development experience

- Other languages: JavaScript, HTML, CSS, Java, C#

Experience

Senior Director, Engineering
Zillow Group, Seattle, WA
2/2017 - 5/2019

Director of Engineering responsible for Zillow Home Loans, Zillow Mortgages (marketplace), and Mortech.

- Managed three geographically distributed software development teams.

- Launched Zillow Home Loans with revamped technology stack.

- Led technical due diligence for Mortgage Lenders of America acquisition (completed 11/2018).

Senior Development Manager
Zillow Group, Seattle, WA
4/2012 - 2/2017

Software Development Manager for Zillow Mortgages.

- Managed team of 6 developers.

- Transitioned legacy Java web application to Python back-end web services and React client-rendered front-end application.

- Led technical due diligence for Mortech acquisition (completed 11/2012).

Software Development Manager
Cisco Systems, Seattle, WA
8/2008 - 11/2011

Development manager of Cisco Home Networking Platform team. Acquired as part of Cisco's acquisition of Pure Networks, Inc.

- Managed Cisco Home Networking Software Platform team of 4-5 developers.

- Managed effort to define the JNAP web services protocol for Cisco Cloud Connect. Generated complete documentation set for HNAP and JNAP protocols.

- Architected and developed Cisco Cloud Connect embedded transactional SOAP/JSON web services framework for JNAP/HNAP protocols in Lua and C based on the HDK server. Framework included simulated device unit test framework for thorough implementation unit testing.

- Developed transacting JNAP cloud back-channel support for Cisco Cloud Connect.

- Architected and developed HNAP Development Kit (HDK), a SOAP/JSON validating client/server web services toolkit. HDK library code written in C. HDK code generators, API documentation generators, and other tools written in Python.

- Developed cross-platform build framework using GNU make to allow single build structure for Windows, Mac, and Linux.

- Defined HNAP Specification Language (HSL) for defining HNAP and JNAP protocols. Developed language parser, language object model, and schema/module code generator tool in Python.

- Developed HDK Lua language bindings in C and Lua C API.

- Managed effort to develop JNAP/HNAP certification tools as well as ensuring that devices passed certification. Worked with internal and external partners to address issues.

Lead Software Development Engineer
Cisco Systems, Seattle, WA
2/2008 - 8/2008

Development manager of Pure Networks Platform team. Acquired by Cisco.

- Managed Pure Networks (Network Magic) Platform Team of 4-5 developers.

- Managed Pure Networks Platform release cycles ensuring timely delivery of platform features to licensees (e.g. Cisco) and internal customers (e.g. Network Magic).

- Develop features in Pure Networks platform using C++ and COM.

- Manage effort to fully document Pure Networks Platform using Doxygen.

- Technical point of contact for Pure Networks Platform licensees. Worked with business development team to pitch the Pure Networks Platform to potential partners.

Lead Software Development Engineer
Tableau Software, Seattle, WA
7/2005 - 12/2007

Development Lead for Tableau Desktop team.

- Managed Tableau Desktop team of 3-5 developers.

- Managed Tableau Desktop product requirements gathering, feature definition, and software development schedules.

- Architected and developed annotation feature using C++ -- Visio-like smart shape engine, rendering surface, hit-testing, selection, and abstract handle architecture.

- Designed and developed packaged workbook feature using C++ and zlib. Created packaged workbook APIs using C++ for Tableau Server.

- Designed and developed columnar visualization field labels feature using C++.

- Designed and developed data label manipulation feature using C++.

- Designed and developed mapped image UI and hyperlinks UI using C++ and MFC.

- Designed and developed filtering UIs, joins UI, data extract UI, and table calc UI using C++ and MFC. Re-factored backend filter editing interfaces.

- Designed and developed color encodings and UI using C++ and MFC. Created color palette editing tool in Visio.

- Designed and developed Tableau printing support using C++ and MFC.

Senior Software Development Engineer
Microsoft, Seattle, WA
9/2000 - 4/2004

Visio ShapeSheet Owner - Responsible for Visio ShapeSheet Engine (SSE), binary file format, binary file format conversion, drawing/shape merge, placement and routing.

- Invented and implemented SSE geometry functions using C++.

- Designed and implemented SSE cell functions using C++.

- Designed and implemented SSE model generation using C++.

- Invented and implemented SSE SetAtRef and Bound functionality using C++.

- Added new sections, rows, cells, functions, enumerations, and types using C++.

- Implemented "phase 3" conversion framework (C++) and code generation tool (Perl).

- Implemented indexed-to-named section conversion using C++.

- Designed and implemented Visio ShapeSheet file format reporting and differencing tool using Perl.

- Implemented NURBS connector (curved appearance dynamic connector with obstacle avoidance) using C++.

- Re-factored graph object synchronization code using C++.

Lead Software Development Engineer
Rivals.com, Seattle, WA
11/1999 - 9/2000

Development Lead for Rivals website team of 4 developers.

- Managed team of 4 developers responsible for developing Rivals.com website.

- Developed live Major League Baseball scores page using Perl and Javascript.

- Designed and developed Rivals template builder architecture. Wrote template compiler using C++. Designed database schema and stored procedures using SQL Server. Developed website runtime support using ASP, Javascript, and ADO.

- Developed Rivals.com website Javascript preprocessor using C preprocessor and nmake.

- Developed common href utilities and macros using Javascript, ASP, and C macros. This enabled multiple verticals and multiple domains per server.

- Developed website debug and profiling facilities using ASP, Javascript, and C macros. Developed Rivals debug window for viewing debug output in VB. Wrote profiler ASP component using C++, ATL, COM.

- Developed several website modules including ad module and story modules using ASP, Javascript, and ADO.

Software Development Engineer
Visio Corporation, Seattle, WA
6/1997 - 11/1999

Developer on Visio Engine Placement and Routing (PNR) Team.

- Responsible for development of graph object and integration with Visio engine; implemented C++, ATL, COM, IDL.

- Wrote PNR feature definition for Visio 2000; detailed functionality, UI, data requirements, file conversion.

- Designed and developed custom properties and size and position windows in C++ and MFC.

- Designed and developed dialog sub-system and viewer in C++ and MFC.

Software Development Engineer
Hughes Information Technology Systems, Aurora, CO
2/1996 - 5/1997

- Architect/developer on Java distributed agent research project; designed distributed agent architecture and developed domain-specific solutions within architecture. Implemented using Java and Java RMI.
- Developed C++ GUI (X/Motif) code generation tool in C++; tool used extensively in-house to improve efficiency and quality of C++ GUI development.
- Designed and developed X/Motif GUI front-end for C++ GUI code generation tool in C++.
- Developed automatic code-merging feature for C++ GUI code generation tool in Perl.

Software Development Engineer
Quark, Inc., Seattle, WA
6/1993 - 2/1995

Member of QuarkXPress for Windows development team.

- Designed and implemented context sensitive help support in QuarkXPress in C.
- Developed software (C++) and process used to duplicate and serialize product diskettes increasing ease of use and installation; made product production more efficient.

Patents

Hobbs, C. "System and method for efficiently creating splines" - US Patent No. 6654016, 2003

Hobbs, C., LeGendre, S., Fuhr, R. "System and method for placing splines using refinement and obstacle avoidance techniques" - US Patent No. 6650328, 2003

Hobbs, C. "A Method for Formulaically Redirecting and Modifying Formula Set Operations in a Spreadsheet" - US Patent No. 7444584, 2008

Hobbs, C., LeGendre, S., Nelson, M. "A Method of Formulaically Bounding (Validating) Data in a Spreadsheet" - US Patent No. 7318192, 2008

Hobbs, C. "Functions acting on arbitrary geometric paths" - US Patent No. 7612776, 2009

Education

Masters of Business Administration (MBA), Technology Management, 2007
University of Washington, Seattle, WA

Bachelor of Science (BSc), Electrical and Computer Engineering, 1993
University of Colorado, Boulder, CO