Jeff Walker

Software Craftsman

Seventeen years of experience as a software developer and architect * Agile * Full-stack * Cloud * Design Patterns * Refactoring * Domain Driven Design (DDD)

"writes code as fast and as beautiful as any developer I've known." —Craig McKeachie

"very detail oriented and meticulous, consistently producing top-quality work." —Scott Walker

"one of the most talented developers that I've had the opportunity to work with."

—Keith Byers

Enterprising

Started software business * Wrote parts of product for auto-scaling DynamoDB * Conceived and designed programming language: Adamant * Love learning new technical subjects (e.g., Rust, Idris) * Enjoy reading textbooks, topics: computational neuroscience, linear algebra, statistical learning * Took initiative on product design of Learning Management System for SchoolPointe * Often first person to recognize, learn, and promote best practices, methodologies and tools * In college, researched and taught a class that covered functional vs. OO programming, lambda calculus, design patterns, refactoring, and parametric polymorphism * Quickly become the go-to person for solving hard technical problems * Learned new tools on the job and became the resident expert multiple times * Dive in and learn business domains e.g., bank CD accounting, health insurance, police incident reports, etc. * Learning digital typography * Learned and used InDesign and created résumé * Seek to understand problems deeply in order to solve the right ones the right way * Completed college in three years

"Not only working software, but also well-crafted software" —Manifesto for Software Craftsmanship

Language Designer

Independently conceived and designed a new programming language: Adamant * Wrote a compiler for a subset of Adamant * Bootstrapped a compiler from C for subset of Adamant * Drafted Adamant Language Reference * Created a VSCode extension for syntax highlighting * Researched programming language design including: Rust, Swift, C#, Scala, Project Midori, Java, Kotlin, Idris, Pony, Fortress, and JAI * Researched type systems for memory management * Researched compiler construction tools * Revised a Domain Specific Language (DSL) design for TDCI * Created a Scheme variant and interpreter for college project * Passion for programming language design began in High School

Participative Leader

SCHOOLPOINTE: Head of all technical employees; reported directly to president * Managed four developers and a sysadmin working on three products serving 375+ school districts * Made multiple successful hires * Created product design for Learning Management System (LMS) * Architected LMS * Oversaw improvements to architecture leading to increased uptime and reduced costs * Led push to consolidate code bases, putting the company in a stronger position to innovate * Oversaw start of transition to a DevOps approach including infrastructure as code and zero-downtime deployments PRIMARY FINANCIAL COMPANY: Technical lead of a six developer team * Software architect * Implemented an Agile project methodology and a Domain Driven Design (DDD) approach * Collaborated with the customer representatives to understand the domain and domain language * Decided technical design * Designed the domain model * Performed all code reviews * Mentored junior team members AFFINION GROUP: Advised on and managed cloud migration by offshore consultants * Reviewed source code and deployment scripts

Portfolio

Adamant Language Blog
Adamant Language Documentation
Adamant Compiler
Learning Rust Modules Talk
Algorithm Comparison: Rust and C#
Personal Software Development Blog
JavaScript Minefield (six post series)
Adamantworks.Amazon.DynamoDB

blog.adamant-lang.org/archive adamant-lang.org/documentation github.com/adamant/adamant.tools.compiler.bootstrap youtu.be/3MQUdXRB1Gc github.com/WalkerCodeRanger/dfaMinimizationComparison WalkerCodeRanger.com/blog WalkerCodeRanger.com/blog/2014/02/javascript-minefield github.com/Adamantworks/Amazon.DynamoDB

Education

B.A. in Computer Science, Minor in Mathematics

May 2002 | OBERLIN COLLEGE oberlin.edu

Presentations

	Columbus Rust Society Meetup	
Mar. 2019	Reconceptualizing Rust Lifetimes	
Jan. 2019	Rust Lifetimes History and Implementation	
Mar. 2018	Adamant Language Update	
Feb. 2018	High Line Kata Review	
Jun. 2018	Rust Error Handling	
Sept. 2015	Learning Rust Modules	youtu.be/3MQUdXRB1Gc
	CodeMash 2017	codemash.org
Jan. 2017	The Evolution of Memory and Resource Manageme	ent
	The Rust Language: Memory, Ownership, and Lifet	imes
	Columbus Rationality Meetup	
Nov. 2016	A Rational Alternative to Budgets	
May 2016	Who Cares About the Future? You Do	
	Quick Solutions: Lunch & Learn	
2013	F# vs. Scala	
2012	Domain Drive Design: What is it?	

Blog Posts

	Adamant Language Blog	blog.adamant-lang.org	
Mar. 2019	Dreaming of a Parser Generator for Language D	esign	
Feb. 2019	Operator Precedence: We can do better		
	Rust Lifetime Visualization Ideas		
	The Language Design Meta-Problem		
Dec. 2018	A New Approach to Lifetimes in Adamant		
	Basic Memory Management in Adamant		
Nov. 2018	Garbage Collection is a Hack		
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	Personal Software Development Blog	WalkerCodeRanger.com/blog	
Sept. 2015	CSS is Not Composable		
Aug. 2015	Learning Rust Modules		
July 2015	Unleashing C# Generic Constraints with Extension Methods		
June 2015	Advice for Open-Source Projects		
	The State of JS Build Tools 2015		
Mar. 2014	Ember.js on Cassette: Embedding Templates		
FebApr. 2014	The JavaScript Minefield (six post series)		
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Experience

May 2018-Present	Adamant Programming Language	adamant-lang.org	
Feb. 2017-Sept. 2018	Affinion Group Consultant via The Execu Search Group	affinion.com execu-search.com	
Feb. 2016–Jan. 2017	Adamantworks/Sabbatical Started Adamantworks LLC		
Sept. 2013-Jan. 2016	SchoolPointe	schoolpointe.com	
Aug. 2012-Sept. 2013	Apprisen Consultant via Quick Solutions	apprisen.com	
May 2010-Aug. 2012	Primary Financial Company Consultant via Quick Solutions	epfc.com	
Apr. 2010	Resource Interactive Consultant via Information Control Corporation		
Oct. 2009-Feb. 2010	Information Control Corporation	icctechnology.com	
Oct. 2008-Aug. 2009	TDCI		
June-Oct. 2008	Chase Consultant via Quick Solutions	chase.com	
Dec. 2007-May 2008	United Healthcare Consultant via Oxford Consulting	uhc.com	
July 2004-Nov. 2007	Foresight Corporation Hired full-time Oct. 2004		
Aug. 2002-June 2004	Optimum Technology	otech.com	
Spring 2002	Advanced Topics in Object-Oriented Programming		
	ExCo (Experimental College) Instructor at Oberl	in College	
Received three credits for teaching an ExCo course at Oberlin C			
Fall 2000-Spring 2001	Oberlin College Computer Science Program	cs.oberlin.edu	
	Lab Aid and Grader for CS 150 and 151		
	Junior Assistant Systems Administrator		

Core Skills

C# * Programming Language Design * Agile * Technical Leadership * Design Patterns * Refactoring * ASP.NET MVC * HTML * CSS * JavaScript * Domain Modeling * Software Architecture * Mentoring * Code Review * Git

- * Management * Domain Driven Design (DDD) * Blue-green Deployment
- * Amazon Web Services (AWS) * Amazon S3 * Amazon DynamoDB * Lexing
- * Parsing * Public Speaking * SQL * SQL Server * Hiring * Agile and Lean Project Management * Domain Specific Language (DSL) Design * Documentation
- * Writing * EBNF * GitHub * Product Design * Cloud Migration

Experience With

Pair Programming * Test-Driven Development (TDD) * Python * Scrum

- * Rust * Idris * CoffeeScript * NHibernate * Less * jQuery * Parser Generators * Entrepreneurship * VSCode extensions * IoC Containers * XML
- * UML * SQL Azure * Microsoft Azure Cloud * Deployment Scripts * DevOps
- * Azure Queues * C * C++ * Behavior-Driven Development (BDD) * Publishing NuGet Packages * AJAX * Oracle Server * Windows Presentation Foundation (WPF) * XAML * SSIS * ASP.NET Forms * VB.NET