

# Jeff Walker

“Not only working software,  
but also *well-crafted software*”  
—*Manifesto for Software Craftsmanship*

## 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

## 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

## 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

## Education

May 2002 | *B.A. in Computer Science, Minor in Mathematics*  
OBERLIN COLLEGE [oberlin.edu](http://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](https://youtu.be/3MQudXRB1Gc)

*CodeMash 2017* [codemash.org](http://codemash.org)

Jan. 2017 | The Evolution of Memory and Resource Management  
The Rust Language: Memory, Ownership, and Lifetimes

*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](http://blog.adamant-lang.org)

Mar. 2019 | Dreaming of a Parser Generator for Language Design  
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

*Personal Software Development Blog* [WalkerCodeRanger.com/blog](http://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  
Feb.–Apr. 2014 | The JavaScript Minefield (six post series)

# Experience

May 2018–Present	<i>Adamant Programming Language</i> Independent Project	adamant-lang.org
Feb. 2017–Sept. 2018	<b>Affinion Group</b> Consultant via The Execu Search Group	affinion.com execu-search.com
Feb. 2016–Jan. 2017	<i>Adamantworks/Sabbatical</i> 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	<i>Advanced Topics in Object-Oriented Programming</i> ExCo (Experimental College) Instructor at Oberlin College Received three credits for teaching an ExCo course at Oberlin College	
Fall 2000–Spring 2001	Oberlin College Computer Science Program Lab Aid and Grader for CS 150 and 151 Junior Assistant Systems Administrator	cs.oberlin.edu

# 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 \* Haskell \* 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