

Jeff Walker

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

Software Craftsman

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

“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

Language Designer

AZOTH: Pivoted to working on Azoth * Adapted language reference and compiler from Adamant for Azoth * Migrated compiler to rewritable reference attributed grammar (ReRAG) approach * Experimented with nanopass approach

ADAMANT: Conceived and designed a new programming language * Wrote a compiler for a subset * Drafted a Language Reference * Created a VSCode extension for syntax highlighting * Researched language design including: Rust, Swift, C#, Scala, Project Midori, Java, Kotlin, Idris, Pony, Fortress, and JAI * Researched compiler construction tools & type systems for memory management

OTHER: Revised a Domain Specific Language (DSL) design for TDCI * Created a Scheme variant and interpreter for a college winter-term project

Portfolio

SemVer NuGet Package
ExhaustiveMatching.Analyzer
Azoth Language Site
Azoth Compiler
Adamant Lang. Site, Blog, & Docs
Adamant Compiler
Learning Rust Modules Talk
Algorithm Comparison: Rust and C#
Personal Software Development Blog
JavaScript Minefield (six post series)

github.com/maxhauser/semver
github.com/WalkerCodeRanger/ExhaustiveMatching
azoth-lang.org
github.com/azoth-lang/azoth.tools.bootstrap
adamant-lang.org blog.adamant-lang.org/archive
github.com/adamant/adamant.tools.compiler.bootstrap
youtu.be/3MQUdXRB1Gc
github.com/WalkerCodeRanger/dfaMinimizationComparison
WalkerCodeRanger.com/blog
WalkerCodeRanger.com/blog/2014/02/javascript-minefield

Participative Leader

DEEPCELL: Technical lead and software architect of the instrument software team * Joined Deepcell before Series A * Team started as myself and one junior developer * Hired until the team consisted of myself, six developers, an SDET and a technical manager * Developed instrument software for multiple generations of prototype instruments and the final REM-I instrument * Involved in all aspects of the instrument software including product design, UI, gathering requirements from internal users, and project management * Designed a framework for devices and device connections * Designed and implemented a framework for units of measurement and structured concurrency * Designed and implemented framework for advanced time series data management and computed time series on the instrument * Code review * Mentorship * Set code conventions and setup tools to aid and enforce them

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

Experience

Aug. 2019–Mar. 2024	Deepcell	deepcell.com
Oct. 2020–Present	<i>Azoth Programming Language</i> Independent Project	azoth-lang.org
May 2018–Aug. 2020	<i>Adamant Programming Language</i> Independent Project	adamant-lang.org
Feb. 2017–Sept. 2018	Affinion Group 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	

Education

May 2002	B.A. in Computer Science, Minor in Mathematics OBERLIN COLLEGE	oberlin.edu
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Core Skills

C# * Agile * Design Patterns * Refactoring * Domain Driven Design (DDD)
* Domain Modeling * Software Architecture * Mentoring * Technical Leadership
* Code Review * Instrument Software * Programming Language Design * Structured
Concurrency * ASP.NET MVC * HTML * CSS * JavaScript * Git * Management
* 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

Reactive Extensions (Rx.NET) * Reactive UI * Windows Presentation
Foundation (WPF) * Test-Driven Development (TDD) * IoC Containers
* Simple Injector * Pair Programming * Task-like types * NHibernate
* NodaTime * T4 Templates * Python * Roslyn Analyzers * UML * Scrum
* async/await * Rust * Less * jQuery * XML * Parser Generators
* Entrepreneurship * VSCode extensions * SQL Azure * DevOps * Azure
Cloud * Deployment Scripts * Azure Queues * C/C++ * Behavior-
Driven Development (BDD) * Publishing NuGet Packages * XAML
* Oracle Server * ASP.NET Forms * VB.NET * Many others