

William Michael Caldwell

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SUMMARY

A highly skilled and experienced software development leader who has architected, developed and maintained a wide array of software systems over the past 20 years, and who has built and led teams and organizations to consistent high performance, seeks an engineering leadership position in a dynamic organization to create high-value, business-impacting software systems.

Michael has architected, developed and maintained a wide variety of applications and systems in many industries, including product development tooling, digital marketing, healthcare, insurance, finance and telecommunications.

Michael has 20 years of experience creating and refactoring many types and tiers of software systems, including end-to-end platforms, web apps and service layers, backend agents and data pipelines, business workflow engines, databases and warehouses, libraries and custom frameworks.

Michael is an expert and leader in writing "clean code" and building highly maintainable and testable software by leveraging enterprise patterns and frameworks, best practices and principles, and modern tooling and processes, which lead to repeatable and predictable project success.

Michael excels at migrating and improving existing apps, databases and entire platforms, thereby evolving them into maintainable and modern software systems which follow best practices and patterns and leverage appropriate technology.

Michael is a skilled product manager, able to seamlessly combine product requirements, analysis and design with the software development process. This approach arises from his years as a software development consultant, architect, engineering leader, as well as his years of experience as an entrepreneur, business owner and sales professional.

Michael is a talented and experienced software engineer, architect, product developer, coach, advisor and leader.

EDUCATION

B.A. with Distinction – The University of North Carolina at Chapel Hill

AUGUST 1989 - MAY 1993

Member, Phi Beta Kappa

University Honors Program, completing 15+ Honors courses

Fellow of the College of Arts and Sciences

SOFTWARE DEVELOPMENT EXPERIENCE SUMMARY

- SaaS Platforms
- Data and Machine Learning Pipelines
- Content management and generation systems
- Messaging apps and engines
- Reporting and document delivery systems
- Business process automation
- Web service layers, gateways and microservice architectures
- Database schema development, redesigns and migrations
- Custom software frameworks
- Workflow and orchestration services
- Line-of-business operations and management systems
- Application and whole system refactoring
- Legacy system integrations and replacement

SOFTWARE DEVELOPMENT EXPERIENCE

Allstacks, Inc, Raleigh NC — Senior Software Engineer

NOVEMBER 2018 - PRESENT

Building and maintaining a SaaS platform for software engineering performance management, risk mitigation and delivery forecasting.

I am the first full-time engineering hire for this early-stage B2B SaaS software startup.

Technologies used: Python, Django, Postgres, REST, Docker, AWS and all common source control and issue tracking tools and platforms

Mapp Digital US, LLC, Raleigh NC — Software Architect and Technical Lead

MAY 2018 - NOVEMBER 2018

Maintained complex campaign and content management applications. Building new cross-channel reporting solutions.

Developed Machine Learning pipelines and applications for predictive analytics for marketing content and audiences. Joined and then led the Insights/Intelligence team.

Technologies used: Java, Spring/Spring Boot, Node.js, Express, Javascript, Python, Flask, Postgres, Gunicorn/uWSGI, MySQL, Kafka/Kinesis, Cassandra, HDFS/Hadoop, Docker, REST, GraphQL, Angular, Jira, Gitlab, and many well-known AWS infrastructure services

Netsertive, Inc, Morrisville NC — Principal Software Engineer II, Principal Software Engineer, Senior Software Engineer

APRIL 2011 - APRIL 2018

Developed new web applications, services, API platforms, libraries and backend automation apps, adding new features to existing apps and sites, creating new databases, automation, content generation

systems, and reporting systems for various digital ad technology needs, such as account and campaign management, client reporting and self-service portals, notifications and alerts, and digital advertising platform/network API access.

Provided technical leadership and mentoring to the entire software engineering team of approximately 40 professionals in RTP and St. Petersburg, Russia. Involved in all aspects of sprint planning and delivery using Agile/Scrum. Served as scrum master and/or team lead for several delivery teams. Actively involved in the hiring process for engineering and product team members. Has organized the Weekly Architecture Meeting for years, where any engineer can present a topic of interest. Has himself presented many technical, design and other professional topics to the organization. Once taught 10 non-Engineers how to program, through a several month long course meeting three times a week, allowing them to add minor features and fix bugs in existing apps. Currently actively involved in business and product development strategy, and consulting with all company executives.

Three-time Company Annual Award Winner: Innovation Impact - 2016, Total Ownership - 2015, Excellence in Client Satisfaction - 2011

Technologies used: Java, Spring/Spring Boot, PHP, JavaScript, React, Redux, HTML, CSS, Node.js, JQuery, jQueryUI, MySQL, MongoDB, MVC, REST, Docker, Kubernetes, Apache, Tomcat, Eclipse, IntelliJ, JSON, JSON-P, Bash, PHPUnit, JUnit, Jira, Confluence, Bitbucket, Jenkins

MED3000, Raleigh NC — Senior Software Engineer

DECEMBER 2008 - APRIL 2011

A lead developer in maintaining a large and complex Electronic Medical Record product. Directly responsible for significant new functionality in this web-based system. Also developed a configurable message delivery engine to handle prescription coverage eligibility, medication history, and formulary transactions and data feeds. Lead developer for a new Practice Management product we acquired. Actively involved in the hiring process for additional engineering team members.

Technologies used: ASP.NET, ASP (classic), SQL Server 2005, C#, .NET Web and Windows Services, Visual Studio 2008 and 2005, MSMQ, JavaScript, DHTML, XML, AJAX, XSLT, TFS

Motricity, Inc, Durham NC — Senior Software Engineer

OCTOBER 2007 - NOVEMBER 2008

Performed a major refactoring of a large, complex and strategically important mobile games engine, making it maintainable again and preventing likely catastrophic failure. Also developed major extensions to the Gateway/BST messaging system for performance, reliability, and feature improvements. Created and maintained several test clients and simulators. Served as a technical leader and member of the architecture team.

Technologies used: C#, VB.NET, .NET Web and Windows Services, Visual Studio 2005, ASP.NET 2.0, SQL Server 2005, MSMQ, all major .NET APIs, JavaScript, DHTML, JSON, VSS, NUnit

Investors Title Company, Chapel Hill NC — Senior Consultant

SEPTEMBER 2005 - OCTOBER 2007

As a full-time consultant through Vaco Technology, developed new web apps to replace a legacy system, called Eflite 2.0 and eJacket Manager, which are two mission-critical, distributed, web-based transactional systems for use by external customers, affiliated agencies, and internal branches. Developed automation services for creation of an enterprise-wide business data store, and for financial systems integration. Redesigned and migrated databases using innovative data transformation applications. Lead a team of three developers.

Technologies used: ASP.NET 2.0, VB.NET, Visual Studio 2005, SQL Server 2005 and 2000, ADO.NET, JavaScript, HTML, DHTML, AJAX, .NET Remoting, Surround Source Control, TestTrack Pro.

Tapco Underwriters, Inc, Burlington NC — Senior Software Developer

JANUARY 2003 - JUNE 2005

Extraordinary success in designing, developing, and deploying a series of software systems that automated many previously manual business functions, dramatically improving employee productivity, replacing legacy applications, modernizing customer and partner communications, thus enabling my employer to grow rapidly and become one of the most outstanding companies in its industry. Started work as a contractor (please see below).

Technologies used: VB.NET, SQL Server 2000, Active Reports, C#, ASP.NET, ADO.NET, Visual Studio 2003, Visual Source Safe, .NET Remoting

Eliassen Group, Inc, (multiple locations) — Software Developer Consultant

MARCH 2002 - JANUARY 2003

Client: Tapco Underwriters, Burlington NC, JULY 2002 – JANUARY 2003

Developed numerous custom software apps to increase worker productivity, improve customer service, automate workflow, and replace difficult to maintain legacy systems.

Technologies used: VB.NET, SQL Server 2000, Crystal Reports, .NET Web Services

Client: RBC Centura, Rocky Mount NC, FEBRUARY 2002 - JUNE 2002

Developed a materials, equipment and security access request site to be used by all Centura Bank employees.

Technologies used: ASP.NET, VB.NET, Visual Studio.NET, SQL Server 2000

Client: Stone Building Supply, Raleigh, NC, JANUARY 2002 - MARCH 2002

Designed and developed a Job costing and budgeting application for the Construction Division of Carolina Builders. Analyzed business requirements and created requirements document, project plan, project schedule, test cases, and other documentation. Developed import module, user interface, and reports.

Technologies used: Microsoft Access 2000 and Microsoft Word 2000.

Eagle Vision Software, Raleigh NC — *Software Developer Consultant*

APRIL 2002 - JULY 2002

Client: **Baker Roofing**, Raleigh NC

Developed a data-driven business intelligence intranet site that interfaces with an existing vehicle GPS tracking system. This was my final client project in a series of projects over a successful three-year run as a consultant/subcontractor with Eagle Vision. Please see additional Eagle Vision client work below.

Technologies used: ASP.NET, VB.NET, Visual Studio.NET, SQL Server 2000, Microsoft Access 2000, Microsoft Visio

Modis, Inc, Cary NC — *Software Developer Consultant*

MAY 2002 - JUNE 2002

Client: **IBM**, Research Triangle Park NC

Maintained intranet and client-server applications that I previously designed and developed. (This was a follow-up contract for the same department within IBM. Please see previous position description with Modis and IBM below.)

Technologies used: Visual Basic 6.0, Active Server Pages 3.0, COM, DCOM, and COM+, Internet Information Server 5.0, HTML, VBScript and JavaScript, Microsoft Access

Blue Lizard Software, (multiple locations) — *Software Developer Consultant*

AUGUST 2001 - MAY 2002

Client: **Duke University Bryan Alzheimer's Disease Research Center**, Durham, NC

Developed a three-tier distributed application to manage the center's clinical, autopsy, and research operations. Responsible for analyzing requirements, and designing and developing the solution, including all user interfaces, server components, and database objects.

Technologies used: Visual Studio.NET, VB.NET, SQL Server 2000, Microsoft Access 2000, Microsoft Visio, and Visual Source Safe

Client: **Abbott Laboratories**, Boston, MA

Designed, developed, and tested desktop applications as extensions to Abbott's existing systems. These applications performed a variety of database and data export operations based on business logic and user-configurable options.

Technologies used: Visual Basic 6.0, Access 2000, the Windows 32 API, and Microsoft Visio

Client: **Duke University Department of Medicine**, Durham, NC

Designed, developed, and tested an internet application for department employees and their supervisors to record and view monthly schedule and benefits information.

Technologies used: Active Server Pages 3.0, JavaScript, Visual Basic 6.0, and SQL Server 7.0

Client: **North Carolina Prisoner Legal Services**, Raleigh, NC

Helped develop a client-server info mgmt system tracking cases, clients, billings, and staff time.

Technologies used: Access 2000 and SQL Server 2000

Client: North Carolina Department of Environment and Natural Resources, Raleigh NC

Designed and developed a 3-tier distributed application for the purpose of managing North Carolina municipality construction project applications, approval processes, loans, and grants. Project was terminated due to loss of funding.

Technologies used: Visual Basic 6, SQL Server 2000, COM+, Access, Excel, and Word 2000 automation

Eagle Vision Software, Raleigh NC — *Software Developer Consultant*

JUNE 2001 - AUGUST 2001

Client: Structure House, Durham, NC

Designed, developed, and tested major changes to a client-server customer information management system. This involved incorporating client medical data and therapy records into the software, as well as building a custom query and reporting application. Also maintained existing applications as necessary. Migrated existing data from SQL Server 6.5 to SQL Server 7.0 and extended database schema as necessary.

Technologies used: Visual Basic 6.0, SQL Server 6.5 and 7.0, Visual Source Safe, and Microsoft Access and Word 2000 automation

Modis, Inc, Cary NC — *Software Developer Consultant*

JULY 2000 - JUNE 2001

Client: IBM, Research Triangle Park NC

Designed and developed an intranet system consisting of numerous ASP pages and several VB COM components and databases in order to measure and report world-wide Options and Peripherals demand forecast accuracy. IBM managers worldwide used this intranet site. Designed and developed eight other desktop, client-server, or three-tier applications to analyze business information and automate business processes.

Technologies used: Visual Basic 6.0, Active Server Pages 3.0, COM, DCOM, and COM+, Internet Information Server 5.0, HTML, VBScript and JavaScript, Java applets, Microsoft Access, SQL Server 7.0, and Microsoft Excel automation

Eagle Vision Software, Raleigh NC — *Software Developer Consultant*

JULY 1999 - JUNE 2000

Client: North Carolina State Education Assistance Authority, Research Triangle Park NC

Maintained two recently developed large software applications. Finished unfulfilled system requirements for the client, added many new features and functions, and resolved numerous performance and functionality issues. Developed two additional business applications for the purpose of managing grants for a small health services student loan program and for tracking delinquent computer loans.

Technologies used: Visual Basic 5.0, SQL Server 6.5, Microsoft Access, Microsoft Excel and Word automation, COM, DCOM, Microsoft Transaction Server, and Visual SourceSafe

Modis, Inc, Cary NC — Technical Support Specialist

MAY 1998 - JULY 1999

Client: Cotton Incorporated, Raleigh NC

Provided technical support, client training, software testing, on-site software installation, and database administration. Designed and developed a customer support application using VB 5.0 and Access 97.

Technologies used: Windows 95/98/NT, DOS/Basic, Visual Basic 5.0, Microsoft Access 97

OTHER EXPERIENCE

Co-Owner, Flour Power Kids Cooking Studios

2009 - PRESENT

Co-owner of a unique, award-winning retail services children's education and enrichment franchise company with 12 locations in 5 states and significant ongoing growth. Four studios were built and started by us, then sold/converted to franchise locations. Eight locations thus far have been sold as new franchisee territories. Additional Info: <http://www.flourpowerstudios.com>

I am not actively involved in day-to-day operations of the company.

Multiple Sales Positions, Charlotte NC

SEPTEMBER 1995 - MAY 1998

Sold insurance for Design Benefit Plans (Health and Life Insurance), securities for Interstate Johnson Lane (a full service securities brokerage), and office copier and printing equipment for a Xerox Corp. licensed dealer, including two weeks of training at the once-famous Xerox University in Leesburg, VA.

Additional Info: Please ask for any additional details.

District Sales Manager, Vector Marketing Corp, Charlotte, Durham, Raleigh NC

MAY 1990 - AUGUST 1995

Advanced from an entry-level field sales position to a regional owner responsible for all recruiting, training, team development, sales and operations. Received numerous individual and team sales awards. Received invaluable training and mentoring.

Additional Info: <http://vectormarketing.com>

Vector/Cutco does not work out for the vast majority of those who start. It was an extremely positive, rewarding and enriching experience for me.