Andy Mehalick //andy.mehalick.com

Software Engineer, Founder, CTO

With a dedication for building beautiful and complex software systems I've spent the last 18 years as an engineer, architect, designer, founder, and CTO.

I've built and managed teams, lead developer training, founded user groups, and presented at conferences.

My true passion is building complex software systems that delight users, inspire developers, and deliver measurable value to stakeholders.



Skills

Primary Stack: C# + ASP.NET Core + SQL Server + Entity Framework + Microsoft Azure

Web: JavaScript (TypeScript, Node, Angular, Vue), HTML5, CSS **Testing:** TDD with NUnit and xUnit, Selenium, Postman, Karma

SCM: Git with GitHub, and Bitbucket

Concepts: CI/CD with VSTS, Microservice Architecture, ESB/SOA, Testable Design

Design: Adobe Illustrator and XD, Balsamiq Mockups, Microsoft Visio

Secondary Code: Python, Java, Objective-C, F#

Data: Redis, PostgreSQL, Cosmos DB, Mongo DB

Mobile: Android and iOS with Ionic and Xamarin, iOS with Xcode **Fun:** Arduino, IoT, Game Development with XNA and MonoGame

Experience

Chief Technology Officer

Bilbayt.com

Sep 2017 - Present • 16 mos

As the CTO and chief engineer of Bilbayt.com I manage all software services and lead the engineering teams that build them. Alongside our company founders I develop our technical strategy and provide technical solutions to their business objectives. I am additionally a core contributor to all of our software design, development, and operations processes.

I have recruited, hired, and manage a team of six software engineers all working remotely from Europe, Africa, and South Asia. I manage all planning, project management, and development tasks and lead team training events.

Founder and Managing Partner

Orange Jetpack Studios

May 2014 - Aug 2017 • 3 yrs 4 mos

At Orange Jetpack I was the company founder, managing partner, and chief engineer. I managed all company operations, clients, projects, and our development teams responsible for building modern cloud-hosted software solutions.

I planned and engaged in all marketing activities including bids and proposals, presentations, online marketing, and networking.

I recruited, hired, and managed a team of ten software engineers, testers, designers, and project managers working locally and remotely.

Chief Software Engineer

Ecology and Environment, Inc.

Jan 2014 - May 2014 • 14 yrs 5 mos

At Ecology and Environment I was the technical lead on our largest and most public-facing software projects and enjoyed a variety of roles that include chief system architect and engineer, database administrator, user experience designer, development manager, project manager, and marketer.

System Architect

- Designed and developed enterprise-class web, mobile, and database solutions with a strong focus on system quality, durability, reliability, performance, and maintainability.
 Built systems on the Microsoft .NET platform using ASP.NET MVC, Entity Framework, and SQL Server.
- Designed and developed service solutions to support service-oriented architecture using HTTP REST services and SOAP XML web services. Possess a deep understanding of how to effectively leverage independent, decoupled, platform-agnostic services to build composable applications that are easier to maintain, reuse, test, and scale. Built service solutions using the open-source ServiceStack framework, Windows Communication Foundation (WCF), and ASP.NET WebAPI.
- Designed and developed large-scale, high performance data access systems using objectrelational mapping frameworks including Microsoft Entity Framework, LINQ-to-SQL, NHibernate, and Dapper. Have considerable experience designing data access strategies, optimizing data transactions, and profiling database activity using Microsoft SQL Profiler, MVC Profiler, and Glimpse.
- Possess a significant working knowledge of the software design and engineering patterns necessary to build durable and maintainable software with attention to controlled development costs and lower costs of ownership. Understand complex patterns for building software that is composable, reusable, and testable. Favor test-driven development to build software systems with high code coverage, lower defect rates, and higher adaptability to change.
- Developed web applications with strict security requirements and have a deep understanding of authentication and authorization, encryption and data protection, and data integrity. Understand how to identify and develop software to protect against

common web security risks including SQL-injection, cross-site scripting (XSS), cross-site request forgery (CSRF), and session hijacking.

Front-end Engineer

- Developed sophisticated web applications that are either platform and device agnostic or device specific using response design patterns. Have spent significant time designing, developing, and testing web applications optimized for tablet and mobile touch devices.
- Developed highly responsive and interactive JavaScript web applications using jQuery and JavaScript frameworks Knockout and Angular.js.
- Understand how to design and test high performance websites by focusing on content loading strategies, content size, and caching. Have experience merging, minifying, and compressing static resources, optimizing image and media content, tuning Microsoft IIS cache and gzip settings, and leveraging content distribution networks (CDNs).
- Understand how to organize and optimize content for accessibility and Section 508 compliance using HTML5 and WAI-ARIA.
- Understand search engine optimization (SEO) concepts and how to develop and present content to be SEO-friendly.
- UX Designer Developed conceptual user interface mockups and wireframes; develop and present
 working prototypes; perform usability testing; create graphic design assets; optimize and apply
 branding and design with HTML, CSS, and JavaScript.
- Development Manager Designed and managed development process and identify and promote
 the best tools, patterns, and practices for software development including source control,
 continuous integration, test driven development, acceptance testing, issue tracking, deployment,
 and application lifecycle management.

Education

Master of Software Engineering

Pennsylvania State University

Coursework: Requirements Engineering, Software System Design, Pattern Oriented Design, Database Design Concepts, Software Systems Architecture, Enterprise Integration, Applied Human Computer Interaction, Program Understand, Web Security and Privacy, Software Testing, Software Project Management

Bachelor of Science - Information Systems

University at Buffalo

Certifications

MCTS (Microsoft Certified Technology Specialist) – .Net Framework MCPD (Microsoft Certified Professional Developer) – Web Developer

Contact