

A leader for tomorrow's technology



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Profile Summary

An enterprise technology leader with depth and knowledge in the areas of Solution Architecture, Federated Architecture, Event Management strategies, Artificial Intelligence, Data Management, Data and Software Architectures, Lifecycle and Change Management, and innovating with people and personalities at all levels. Bringing creativity, precision, fun and motivation, backed with a reputation for delivering results.

True leadership is a leader who is gifted and in the center of a maelstrom. A person who rallies, organizes and motivates people, effectively leverages resources and assets, and ties together platforms, technologies and strategies while propelling an initiative to its ultimate best outcome. Mike is this leader whose core strengths are:

- An Innovator and leader
- A master of efficiency driven to learn new things
- An effective communicator and motivator

His personality and behaviors support these strengths, promising effective and profitable leadership, leading with style, systems and respect. He has 30 years of experience in Software and Data Architectures, R&D and IT strategy, management, design, development, deployment and change processes. He has served in many roles including CTO, Enterprise and Chief Architect, Solution Architect, Software Development Manager, Software Design Lead, Research and Development engineer, and Software project management.

With his advanced training in Computer Science, Mathematics and Engineering, he has leveraged a strong foundation to produce numerous effective results for a broad range of small to large technology companies.

Mike has a proven ability in identifying technology adoption and roadmap, developing solutions, architecture strategy and business alignment, mentoring design and development approaches, deploying and managing software projects.



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Resume

Technology and Business Competencies

Integration Technologies

- Docker
- Databricks
- Tenant Security
- Micro frontends
- Microservices
- Pivotal Cloud Foundry
- AWS, S3, Kinesis, Timeseries, EC2
- Apache Kafka, Spark
- TensorFlow
- HCP Vault
- Concourse CI
- JSON, XML, CSV
- SSIS, SSRS, SSAS
- Oracle Data Integration

Architecture and Practice

- Data Management Strategies
- Modernization
- TOGAF, Zachman
- Machine Learning
- Neural Network
- MDM
- Data Governance
- Change Management
- CTO Standards
- Cloud, Virtualization
- ITIL
- SaaS, PaaS, IaaS
- Software Design Patterns

Web Technologies

- Angular
- TypeScript
- Angular Material
- Esri
- Adobe Creative suite
- Progressive Web
- SSO
- Flask
- Django
- React
- HTML, CSS, JavaScript
- JSON, XML

Languages

- GraphQL
- NQL
- Python
- Java
- Spring Boot
- C#
- JavaScript
- HTML, CSS
- Fly
- AWK, Shell
- Vault

Platforms, Frameworks

- Angular
- nodeJS
- Pivotal Cloud Foundry
- AWS
- Databricks
- Centos
- MongoDB
- Windows Azure
- Oracle DB
- MySQL
- SQL Server

Protocols, Transports

- DOCSIS
- OAuth2
- HTTP
- TCPIP
- SSL
- SCP
- REST
- SOAP
- JAXWS, JAXB
- JMX, JMS
- SIP, RTC, RTP
- ODBC, JDBC

IDEs and Tools

- VS Code
- IntelliJ
- app.dagrams.net (draw.io)
- Lucidchart
- Oracle SQL Developer
- MySQL Workbench
- Insomnia
- Adobe Creative Suite
- Visio



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Business Development

- Business case development
- Strategy Proposals
- Client relationship building
- New concept creation
- IT Knowledge Management
- Customer care modeling
- Science and research
- Sales and marketing support

Project Management

- Agile, Scrum, KanBan
- Deployment Management
- Change Management
- Software Lifecycle management
- Project LOE
- Budget management
- Resource allocation
- Training, mentoring and best practice guidance

Requirements and Analysis

- Agile, Scrum, KanBan
- Deployment Management
- Change Management
- Software Lifecycle management
- Project LOE
- Budget management
- Resource allocation
- Training, mentoring and best practice guidance

Summary

Specialties: Solution Architecture, Network Monitoring event management, Customer Experience automation, Business Intelligence and Analytics, Enterprise Architecture, Data Management Strategies, Development and Technology Leadership, Deployment and Change Management.

Proven ability in identifying technology adoption and roadmap, discovering innovative uses of data, developing software architecture, technology strategy and business alignment, mentoring design and development approaches and process improvement, and managing software projects.

Bringing creativity, leadership, precision, fun and motivation to software technology endeavors, backed with a solid record for delivering results. Experienced in telecommunications, national security and defense, retail, energy and health care.

- Coordinated and helped define solution architecture process, improving business prioritization, technical capabilities alignment, and directing development teams resulting in lowering costs and timeframes of delivery.
- Generated cross organization architecture alignment and domain capability definitions, eliminating redundancies and producing net new product revenue and customer subscription growth.
- Automated customer experience self-service capabilities yielding \$10-\$20M operational savings per year.
- Improved network monitoring event management to reduce outage costs by \$10M+ per year.



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- Innovated data analytics and machine learning to create new customer experience opportunities improving customer satisfaction scores.
- Created and led the BI program (ACSBI) to aggregate multi-terabytes of data, producing cost savings of \$10M+ per year.
- Increased the availability of business data by 90% through leading the development and deployment of BI self-service web-portal based analytics.
- Generated \$10 million per year in cost savings by streamlining data, applications, reporting, and infrastructures.
- Led team of 10 developers, collaborated with business leads to prioritize and manage IT initiatives, member of portfolio management group.
- Reduced cost of development and deployment by 50%, and time to market, by incorporating change management improvements. Improved customer satisfaction rates.
- Achieved efficiencies using artificial intelligence in applications for knowledge management, aeronautics and space engineering, health care, retail and data management strategies.



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Experience

Principal Architect
(2015-Present) – Comcast

Innovated solution architecture process, conceived architecture artifact and patterns, business requirements, use case development, and problem/scope of work clarification. Coordinated organizational priorities, lowered the cost and timeframe of development cycles, and established cross domain and organization alignment. Skills: Confluence wiki, Jira, Kanban, app.diagrams.net, Lucidchart, Agile, Rally, distributed system architecture, cloud migration, modernization.

Produced cross domain architecture capability definitions for the customer experience organization, coordinated development teams to technical capabilities eliminating redundancies and improving the quality of development deliverables. Skills: SNMP, NQL, AWS, Kinesis, Kafka, architecture standards, enterprise architecture, data governance, GraphQL, domain models, executive architecture presentations.

Coordinated and developed Federated Architecture strategy and roadmap across multiple organizations producing cost savings and aligning technical capabilities. Improved business use case execution and customer experience response times. Innovated alarm and event stream processing and coordinated schema governance. Skills: AWS, Kinesis, GraphQL, NQL, Python, Databricks, Spring boot microservices, Agile, Kanban, Rally, Kafka streams, Event, alarm management, Schema management.

Devised data management strategies that consolidated redundant data sources and transitioned to Comcast standard data architectures and patterns. Improved data availability and real-time synchronization, lowering the cost of managing data and related infrastructure. Skills: Data flow patterns, Databricks, Trino, Spark, app.diagrams.net, solution architecture, python.

Conceived advanced angular based UI framework strategy, consolidating multiple UI tools and projects, initiating micro frontend development, standardized user experience patterns, persona adoption and improving end user experience. Lowered the costs of development, deployment and maintenance, instituted adoption of common technical UI skillsets, and spearheaded software re-use. Skills: Angular, angular material, javascript, nodejs, HTML, CSS, Spring boot java microservices, MongoDB, oracle, concourse CI/CD, script automation, VSCode, Lerna, Commitizen.

Innovated data science initiatives in analytics, machine learning, business intelligence and produced proof of concepts and architecture patterns, for various customer experience initiatives. Skills: Esri, javascript, Python, TensorFlow, Jupyter notebook, neural networks, Cloud Foundry, AWS.



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Developed and coordinated Comcast core architecture initiatives that delivered middle-tier data driven micro-services, development best practices, improved data security, shared data knowledge, and adoption of various data science initiatives across multiple business teams. Skills: Java Spring boot microservices, micro app design patterns, machine learning, Esri, responsive design, angular material, concourse CI.

Chief Architect and Development Team Lead (2011-2015) - Avaya, Inc.

Crafted Avaya Client Service's BI program (ACSBI). Aggregated Avaya's services, IT, customer and partner data farms containing multi-terabytes of data. Produced architectures, led teams and developed patterns for data management, analytics, reporting, deployment and quote-to-cash automation, supporting generation of \$100s of millions in revenue, and producing cost savings of \$10 million+ per year.

Introduced and developed BI Self-service strategy with web-portal based analytics, Oracle and SQL Server integration, leveraging Reporting Services engines, Power BI, Tableau, ETL and data services, enabling automation that transposed the availability of business data by 90%, going from days and weeks, to real-time and on demand.

Developed architecture and implementation of technology infrastructure to data center standards, virtualization, server farms, load balancing, network management, security policy adoption and deployment management. Led efforts to analyze business intelligence vendor offerings, feasibility study and developed acquisition proposals to further BI technology and program adoption.

Created mentoring program and produced training videos, documentation and established development best practices. Created and improved software development lifecycle process by introducing new issues tracking, source control methods, code reviews, and project and program management procedures.

Enterprise Architect and Senior Software Engineering Manager (2009-2011) - Avaya, Inc.

Led team of 10 developers delivering operational data warehouses, consolidating reporting and analytics, supporting sales, internal operations, business partner and customer satisfaction initiatives.

Collaborated with business leads evaluating and prioritizing portfolio needs. Generated \$10 million per year in cost savings by consolidating data and reporting initiatives and supporting infrastructures.

Contributed to architecture and development leadership of J2EE, REST-based, object oriented, rule based diagnostic expert systems for Avaya communication systems and applications. Contributed and supported deployment processes.



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Led and collaborated on transformation to Lean/Agile processes and practices using tools and methods from Atlassian, KanBan, Rally, Scrum, and AgileZen. Supported cultural shift reducing cost of development by 50% and increasing time-to-market feature availability by 75%.

Enterprise Architect (2006-2009)- Avaya, Inc.

Core member of CTO Architecture team developing enterprise architecture, driving cross-divisional alignment, and developing technology programs in System Management, Virtualization, SOA, Remote Access, Agent architectures, end to end fault management, customer support and knowledge management.

Worked CxO level, VP/GM level and Director Level to achieve business wide adoption leading to revenue gain and/or cost savings. Defined, performed analysis and led due diligence on merger and acquisition of technology assets that reduced development and delivery costs and led to revenue gains in Avaya's service business.

Led Serviceability architecture efforts to influence and embed product serviceability into products leading to service support cost savings, establishing industry standardization and enhancing new product sales.

Supported merger and acquisition strategies, developed proof of concepts and presented strategy roadmaps to business divisional leadership.

Attended and collaborated with Gartner, Burton Group and additional industry advisories to interleave best practices.

Developed and governed Internal CTO Standards. Reviewed and made adoption recommendations of external Industry Standards (IEEE, W3C, DMTF, IETF, OASIS, ECMA, SIP) into enterprise architecture efforts.

Senior Software Engineering Manager and Architect (2001-2006) - Avaya, Inc.

Generated \$15 million of new revenue by creating the architecture, design and development of the ASP.NET and C# based customer inventory reconciliation program, using data automation, heuristics and rules-based applications. Defined deployment architecture and integrated into existing change management.

Spawned new product and services revenue by architecting and creating the Java and .NET based traffic analysis expert that measured communications product traffic trends, patterns, anomalies, and crafted heuristic-based recommendation analytics on network improvements, product upgrades and optimizations.



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Preserved company profit by \$25 million per year by creating the credit risk analysis system that derived customer credit worthiness, then used heuristics to determine actions to take, such as service interruption, disengagement and modification of service, to lower the risk of service cost of customers who were not paying or modifying how they pay their service contract bills.

Increased service contract revenue by 50% per year, by creating architecture and development of product location inventory data collection leveraging Oracle Data Warehouse, PERL and .NET software architecture and design. Developed Java based product inventory reporting system (PIPs) that led to increased business partnering which increased services revenue.

Technical Manager and Senior Web Architect (1998-2001) – Cap Gemini, Unison Systems - Qwest Communications

Member of eBusiness Technologies management team defining and managing web application architectures, development environments and standards. Reviewed and selected off-the-shelf toolsets and developed integration strategies and roadmaps.

Managed development of several Intranet applications deployed on Windows 2000, NT 4.0, IIS, HP-UX, Sun, ServletExec2.2, and Linux/Apache. Mentored and trained development staff.

Led the architecture strategy, design and deployment of large knowledge management web portal.

Led effort in building large program management tool for online finance and budget management.

Designed, developed LDAP interfaces for web site security using ISAPI and the Netscape LDAP API.

Designed, implemented data architectures with Erwin, Oracle8, SQL Server, Enterprise Mgr., Query Analyzer. Designed, prototyped, developed and integrated web application modules in .NET.

Defined change management procedures, processes, and developed cost-savings tools.

Senior Software Engineer and Product Manager (1996-1998) - Lockheed Martin

Served as engineering team manager for small flight software team tasked with building real-time embedded software for satellite flight control systems.

Designed software using Shlaer-Mellor OOA, and OOD techniques. Used Ada-95, C. C++ and Shell.

Utilized advanced mathematics, physics and geometric models in implementation of software.



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Performed scheduling and coordination of product teams associated with software product areas.

Helped organization achieve ISO 9001, SEI CMM Level 5 certifications.

IT Consulting and Business Owner
(Periodic, ongoing)

Strategic Transformations, Inc., Chief Technology Officer (CTO)

- ✓ Created technology strategy and launch of RealShopperFeedback™, an IVR based automated survey instrument with integrated web architecture. Managed all phases of design and development.
- ✓ Led IT infrastructure planning, strategy and cost analysis. Made systems and platform recommendations. Led IVR vendor selection process and management including business case and ROI analysis.
- ✓ Defined and implemented .NET based web architecture. Designed interfaces between remote systems. Designed and implemented a SQL Server-based data warehouse featuring extensive reporting.

MidAmerican Energy, Technical Manager and Web Architect

- ✓ Provided architecture strategy and application development for online document management system. Reviewed “off-the-shelf” toolsets and web based solutions and made recommendations.
- ✓ Managed web development activity utilizing Java Server Pages (JSP), Java Beans, IBM WebSphere and SQL Server. Consulted on security issues.
- ✓ Consulted IT, marketing and operations personnel on document management concepts, web security and web server architectures. Coordinated multiple development teams and led documentation efforts.

National Research Corporation, Technical Management and Systems Architect

- ✓ Created technology presentations, proposals, SOW, architecture white papers, requirements and design documentation. Performed architecture analysis, strategy and design for NRC’s DoctorGuide.com project.
- ✓ Designed and developed advanced three-tier Microsoft DNA-based architecture.
- ✓ Provided technical management of all development activity, assisted in defining testing strategy and developed migration and deployment strategies. Designed web site security and consulted on security issues.
- ✓ Performed extensive data modeling using ERWin 3.5. Implemented all database functionality. Designed advanced searching algorithms utilizing caching techniques.



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Software Engineer

(1996) - Lucent Technologies

Served as software engineer in Quality Assurance and Test organization supporting Lucent's communications products portfolio.

Supported development and testing of AT&T's Call Management System (CMS) software. Managed automation test software tools utilizing Korn Shell, AWK, C and Informix.

Designed and delivered reports on performance and functional analysis of software systems.

Software Engineer

(1995-1996) - AT&T Bell Laboratories

Supported Bell Labs software products in system-level testing of enterprise applications. Trained on Bell Labs software engineering techniques and procedures

Designed, wrote, presented and reviewed software system test plans.

Wrote test automation tools utilizing interfaces to Informix databases.

Developed software in Windows NT, UNIX, DOS, Korn Shell, Microsoft PC and SUN Solaris platforms.

Developed log file parsers on both client and server computers.

Software Engineer

(1994-1995) - Hughes Information Technology Corporation (HITC)

Team member responsible for developing a production-released satellite flight-scheduling simulator.

Designed and coded scheduling simulator using Booch OOA and OOD methodologies.

Performed testing analysis and wrote extensive system test documentation.

Researched and wrote scheduling algorithms, and various performance monitors.

Developed simulator components using C++ and DOS-based scripts.

Evaluated and prototyped various artificial intelligence-based scheduling algorithms.



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Education, Certifications and Awards

Master of Science, Computer Science, University of Colorado – Master’s Thesis in Artificial Intelligence

Bachelor of Science, Major: Computer Science and Engineering, Minor: Mathematics with Honors,
University of Colorado

- Data Science Academy Machine Learning Practitioner
- Cybersecurity training
- Secure Coding training (Java and Python)
- Enterprise architecture training
- CTO architecture training
- Microsoft Certified Solution Provider (MCSP)
- MCP - Microsoft distributed applications
- MCP - Microsoft desktop applications
- MCP – Microsoft SQL Server 7.0 design and implementation
- MCP - Microsoft Solutions Architecture
- Awarded Product Integrity Engineer (PIE) – Lockheed Martin
- Docker, Kubernetes training
- Multiple performance rating of exceeded
- Multiple years top 10% Avaya performance rating
- Avaya performance award certifications
- Java certification training
- Member of Tau Beta Pi National Engineering Honor Society
- Member ACM
- Multiple Deans list awards
- Awarded AT&T academic scholarship
- Employee commendations - Lockheed Martin.

References provided upon request.



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