

# Filip Szalewicz – VP of Engineering

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## Key Capabilities

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- Creates decision clarity for the executives
- Accelerates delivery of strategic data engineering products
- De-risks delivery of advanced analytics and data science products
- Innovation driver
- Creates order out of chaos
- Optimizes for time and value

## Competencies

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- Moves fast, automates everything, builds foundational products, mentors people, focused on growing business revenue
- Force multiplier for engineering teams
- Transformational innovation leader dedicated to lean product development
- Invented and implemented multiple platform systems directly responsible for 10+ millions in revenue and growing
- Broad range of experience in leading cloud platforms and technologies
- AWS Certified Architect and Developer
- Advanced work experience with Big Data, Rules Engines, Machine Learning
- Experienced developing and managing local and remote engineering teams
- Small business owner

## Technical Skills

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### Strong

- Java, Node.js, Python, C#, JavaScript, Groovy, PHP, HTML, CSS, AWS, GCP, Drools, Rules Engines, Code Generators, SQL Server, NoSQL DBs, Mulesoft, REST, Integrations, APIs, Full Stack, MVC, Serverless, Architecture, Debugging, Big Data ETL, Data Fusion, Airflow, Hadoop, Spark, Hive, Unit Testing, Performance Monitoring, Security, Frameworks, Configuration Driven Development, Agile, Scrum, TDD, InRule, PB Spectrum, CI/CD, Maven, Data Lake, Data Warehouse, CircleCI, Sagemaker

### Knowledgeable

- Linux, C++, Grails, Docker, ServiceNow, Salesforce, Angular, IIS, Apache, Machine Learning, SEO, Mobile Development, Azure, WordPress, Heroku, TFS, Cloudera/Hortonworks Data Platform

## Soft Skills

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### Strong

- Executive Advisor, Strategic Thinking, Sales Support, Transformational Leadership, Consensus Building, Lean Product Development, Product Design, Mentoring, Communication, Technical Innovation, Requirements Gathering, Presentations, Startup Experience, Problem Solving, Project Management, Time Management, Detail Oriented, Production Support, On Time Delivery, Multitasking, Client Advocate

### Knowledgeable

- Business Planning, Product Marketing, Lead Origination, Cold Calling, Sales, Process Improvement, Relationship Building, Public Speaking, Content Publishing, Persuasion, Data Analytics, Digital Marketing, Finance, Mortgage Process, Automotive, Medical Billing, EMR, eCommerce, Insurance, Steel, Manufacturing, SaaS, Expense Recovery

## Experience

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### Shoptelligence, Ann Arbor, MI

- **Vice President of Engineering** from February 2022 - Present
- Expanded omni-channel platform with two new products, email content recommender for digital campaigns and an in store product recommender experience.
- Delivered data lake and initiated migration of advanced analytics and reporting to the trusted data warehouse.
- Delivered client portal to expand client success capabilities.
- Reduced operational expenses by 25%.
- Implemented metrics driven culture and reduced support issue occurrences to near zero.
- Improved issue resolution time by 500%.
- Assisted in the implementation of an Entrepreneurial Operating System (EOS) across the organization.
- Built a team focused on client support, big data, APIs and performance driven digital marketing.
- Responsible for technical innovation, transformational leadership, platform product development, mentoring engineers, solution architecture, full stack system development, project management, technical team leadership, management of remote engineering teams, deployment and client support of multiple SaaS products.
- Utilized a wide variety of tools and technologies across multiple projects; GCP - BigQuery, Data Fusion, MySQL, Kubernetes, Apigee, Airflow, Looker Studio, Python, Java, JavaScript and others.

### West Monroe Partners, Chicago, IL

- **Senior Architect** from September 2021 - February 2022
- Senior Architect focused on digital transformation, aligned with Data Engineering and Advanced Analytics Competencies, providing advisory services to six clients and private equity executives.
- Responsible for building advanced data capabilities for digital transformation clients, activities include client proposal development, project delivery management, consultant mentoring, SOWs, data lake and warehouse architecture, advanced analytics, leading discovery sessions, consensus building, strategy development across a wide range of clients, team building.

### Rocket Mortgage (previously Quicken Loans), Detroit, MI

- **Team Leader Data Science** until August 2021
- **Principal Software Engineer** from March 2019, 2 years
- **Senior Software Engineer** from March 2017, 2 years
- Team Leader for automated machine learning data science team at Quicken Loans, the #1 mortgage lender and servicer in the US, and one of the best technology companies to work for.
- Several of the big data projects I have engineered have a direct impact on growing revenue as well as cost savings in excess of millions of dollars.
- Built a team focused on automated machine learning platform for the Rocket companies.
- Responsible for technical innovation, transformational leadership, platform product development, mentoring engineers, solution architecture, full stack system development, project management, technical team leadership, management of remote engineering teams, deployment and support of multiple machine learning, cloud and big data initiatives across multiple companies that are part of the enterprise (family of companies).

- Performed as a consulting leader for multiple engineering efforts across Rocket Homes, Rocket Loans and Rocket Mortgage companies focused around big data pipelines, data lakes, data science and analytical projects.
- Performed as a primary engineer for multiple AWS based systems responsible for human resources management, loan, property and client master data management, lead generation, risk mitigation, ESB integrations, enterprise wide REST APIs, rules engines implementations and other projects.
- Performed as a primary engineer in the data science division, operationalized first enterprise data lake and machine learning as a service initiative. Architected platform systems framework and code generators for implementation across data science, big data ETLs and applied it in multiple production systems.
- Participated in the creation of and driving the implementation of a data fabric initiative to provide best sourced data across the enterprise, supported various internal communities, candidate recruitment, represented enterprise at conferences, assisted in development of enterprise cloud standards, ESB integration standards, SOA implementations, created engineering training materials, driving the adoption of push button model deployment and continuous integration and delivery for the data science division.
- Personally mentored and trained dozens of engineers (and multiple business analysts) on configuration driven design, functional programming, rules engines, big data ETLs, Spark programming, performance optimization, code generators, code reuse and personal development, 2020 winner of the "Special Achievement - Automate All the Things" company award.
- Utilized a wide variety of tools and technologies across multiple projects; AWS – Cloud Formation, Dynamodb, SQS, Glue, IAM, Lambda, EC2, ElastiCache, API Gateway, VPC, SageMaker, and others, Mulesoft Gateways and ESBs, Pitney Bowes Spectrum, Cloudera / Hortonworks Data Platform, IBM DSX, Zeppelin, Jupyter, Java, C#, Python, Groovy, Node.js, Tomcat, Drools, Spark, Hadoop, S3, Hive, Ranger, HBase, NiFi, Oozie, InRule, Yarn

## Experience

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### 360ofme Inc, Royal Oak, MI

CTO, Principal Software Engineer

*March 2016 – March 2017*

- Principal Engineer at a startup organization providing the first comprehensive platform with the purpose of managing, securing and controlling the data of you. Product has been officially demonstrated at Dreamforce 16 in San Francisco.
- Responsible for solution architecture, full stack system development, systems deployment and support, technical vendor management, local and offshore team management, mentoring junior engineers, development of framework and various components, including but not limited to REST APIs, web client, server side workers, integrations with a variety of AWS services (S3, Key Management, Lambda and others), SnapLogic, DicomGrid, Salesforce instances, IBM Watson APIs integration and more. Solution is developed primarily with Node.js utilizing HAPI, Express, Angular, MongoDB, Postgresql, RabbitMQ, Salesforce APIs (Apex). Mobile clients have also been developed utilizing ionic framework. The production environment consists of AWS and Heroku utilizing a variety of Heroku add-ons. Architected and developed a unique security implementation to protect the data at all stages including real time transaction monitoring, evaluated the solution for patent filing. Implemented a continuous product delivery process with nightly builds and relies on strong unit testing practices. Solution has been successfully demonstrated at Dreamforce 16.

## Experience

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### Solid Cage Inc, Macomb, MI

Business Owner, Principal Software Engineer

*September 2009 – Present*

- Principal Engineer at a local provider of business websites, web and mobile application development and custom SaaS software development.
- Responsible for solutions architecture and application development, management of resources and customer support.
  - Interacts with project managers, users and business owners to gather and analyze system requirements.
  - Determines project scope, developed project estimates and time lines.
  - Managed full project life cycle including post development customer support.
  - Hands on software development on a wide variety of development projects:

- Developed medical education tool for one of the largest medical organizations in United States. Architected and developed a cloud hosted solution with a responsive front end and scalable processing utilizing serverless design. The system features advanced medical image processing functionality as well as a machine learning component for data mining. This system is deployed on Azure and utilizes a wide variety of its services, including Node.js, bootstrap, Angular, C#, OpenSeaDragon library, Cassandra, Functions, Search and other services. Continuing to support ongoing system development and support requests.
- Developed integrations of a domain separated ServiceNow based software product. Responsibilities includes management and support of related Amazon's AWS environment, integration of multiple third party CCTV/security management software with ServiceNow Incident Management via form customization, UI Actions, UI Policies, UI Pages, Business Rules, Client Scripts, Include Scripts, REST API calls, Inbound Web Services, Email Notifications, Inbound Email Actions, SLA/OLA tasks, extensive use of AJAX, Jelly, Glide stack, CSS, HTML, troubleshooting a variety of software problems, implementing bug fixes and performing root cause analysis.
- tem-now.com, architected and developed a multi-tenant SaaS system with extensive charting, reporting, data entry, restful api functionality and integration with third-party SaaS provider such as ServiceNow. The system is in use by over 20 Fortune 1000 companies, each customer database is a high-volume data store of historical and current transactional data (typical db size of 40+GB). This system was developed utilizing MVC architecture, C#, SQL Server, SQL Server Reporting Services, JavaScript, XML, XSD, WebAPI, jQuery, Bootstrap, wide variety of jQuery and Bootstrap plugins, third party UI theme and many other components. In addition, delivered a real time bi-directional ServiceNow Enterprise and a limited Express integration implementing ITSM processes focused primarily around Incident Management, Configuration Management and the Service Catalog including SLA/OLA tasks and custom workflows. This ServiceNow integration utilized extensive platform customization consisting of custom forms, UI Actions, UI Policies, UI Pages, Business Rules, Client Scripts, Include Scripts, REST API calls, Inbound Web Services, Email Notifications, data imports and transformation maps. This ServiceNow integration enabled the two platforms to exchange data in real time and as a result allowed the entire distributed workforce to efficiently perform their daily duties while seamlessly utilizing both platforms.
- Onestopres.com, architected and developed a SaaS system utilized for high volume property tax search processing in all states. The system was developed utilizing MVC architecture, PHP, MySQL, jQuery and a variety of jQuery plugins and custom Javascript.
- Cboconnectz.com, architected and developed a SaaS based client referral system sponsored by Michigan state government and utilized by non-profit agencies state wide. The system was developed utilizing MVC architecture, PHP, MySQL, jQuery and a variety of jQuery plugins and custom Javascript.
- [www.irenttoown.com](http://www.irenttoown.com), developed primary property search functionality, multiple data import utilities, xml driven Search Engine Optimization code utilizing C#, SQL Server 2008, XML, SOAP Services
- [www.causeEffectz.com](http://www.causeEffectz.com), architected and developed MVC based SaaS multi-tenant decision support system featuring multiple dashboards, advanced real-time data charts, reports and multiple data processing utilities. This FERPA compliant system imports data securely from a dozen of SE Michigan school districts and provides data to over a hundred non-profit agencies. The primary technologies utilized are C#, .Net 4.0, SQL Server 2008, IIS 7.5, MySQL, XML, XSLT, jQuery, Javascript, SFTP
- agency.eyren.com, architected and developed MVC based SaaS multi-tenant data collection and reporting system utilized by over a dozen of adult assisted living centers in California. This system features detailed senior profile including medical history information and is HIPAA compliant. This system is no longer accessible publicly and has become an internally supported system. The primary technologies utilized are Java, MySQL, JBoss 6, JSF 2, Richfaces 4.3, Apache, Javascript.
- [www.eami.info](http://www.eami.info), took over support of this SaaS multi-tenant cost recovery system, developed a variety of new system functionality per client specifications. The primary technologies utilized are C#, .NET 3.5, SQL Server 2008, IIS 7.5, Javascript.
- Developed and provided support for a wide variety of websites; michbusiness.org, corpmagazine.com, michbusiness.com, 101bestandbrightest.com, [www.ardentcause.com](http://www.ardentcause.com), gtagroup.net, rtdtool.com, suite104.com, matsci.com, [www.prismplastics.com](http://www.prismplastics.com), towar.com, bluebooklocal.com and many more. Developed websites with Dot Net Nuke CMS platform, built many custom Dot Net Nuke modules with C#, VB.NET, optimized website and database performance. Developed websites with WordPress, built many PHP plugins for a wide variety of custom functionality utilizing PHP, MySQL, XML, XSLT, jQuery and other technologies. Performed hands on Search Engine Optimization (SEO), Google Ads management (PPC), Google Analytics analysis and ranking improvement for a number of sites.
- Developed mobile applications for iPhone/iPad and Android platforms (title is "MBPA Health Care Reform"), available in app stores for download. The application is a content delivery framework application build using ApplicationCraft system for mobile development, utilizing jQuery mobile, Javascript, C# based web services, SQL Server 2008, IIS 7.5 and PhoneGap for iOS build construction. These applications incorporate fluid design, work consistently on most of the current mobile devices (phones and tablets) and their primary purpose is to deliver organization specific content such as articles, news and related information via secure web services queried by the native application installed on the mobile devices.

## Experience

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### **Healthmaster Holdings LLC, Walled Lake, MI**

CIO, Principal Architect

*November 2006 – September 2009*

- CIO and Principal Architect at an established organization, national market leader in electronic medical records software and Medicaid billing services for K12 schools.
- Responsible for design and development of software products, basic project and technical team management as well as critical customer support. Architected reusable C# / XML code framework utilized across multiple company products. Developed core C# code and stored procedure SQL of a SaaS based web application product to mirror existing client server electronic medical records software. Designed and coded custom medical billing software system processing large volumes of HIPAA 837, 835 and 997 EDI files from over 30 school districts across 11 states, utilized primarily C#, SQL Server 2008, third party EDI processing code modules, XML. Also responsible for overall database model design & development (including stored procedures, views, functions), continuous database performance monitoring and tuning of all mission critical internal and customer databases. Implemented automated application testing, web application stress testing and unit testing practices utilizing AutomatedQA tool and unit test classes. Applied following technologies: C#, ASP.NET, SQL Server, IIS, WSE 3.1, XML, XPATH, XSLT, jQuery, AJAX, JSON, Visual Basic, Visual Studio 2005, Enterprise Library 3.1, SQL Server 2000, 2005 & 2008, SourceSafe, SQL Server Profiler

## Experience

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### **imX Solutions, Royal Oak, MI**

CTO, Lead Developer

*September 2005 – November 2006*

- CTO and Lead Developer at a startup organization, market leader in digital gift cards payment form and two factor authentication security solutions for the Internet.
- Responsible for design and development of software products, basic project and technical team management as well as critical customer support. Acted as an architect and lead developer for the company flagship product, digital gift card utilized to conduct secure monetary transactions across the Internet. The transaction system was a basic secure banking system utilizing Java, Oracle, Jboss, Tomcat and Apache technologies. Digital gift card solution was developed with Flash action script and secured with custom code encryption and obfuscations tools. Additionally, developed system monitoring and intrusion detection tools and patented context token two factor authentication solution. Applied following technologies: C++, C# and SQL Server, MVC, Java, Oracle, Jboss, Tomcat, J2EE, JSP, XML, Hibernate and Apache

### **JDM Systems Consultant, Farmington Hills, MI**

Senior Consultant, Enterprise Architect

*November 2003 – September 2005*

- Enterprise Architect at a large consulting practice (200 person organization), local market leader for technical resources, systems development and project management.
- Responsible for enterprise architecture recommendations, development of coding standards and practices, design and implementation of reusable solutions, web services for a global automotive parts supplier and various other organizations. Architect of GFAD (Global Framework Architecture for Development) for a global supplier organization, developed global authentication system and supported global support request ticket system. Applied following technologies: C#, VB.NET, ASP.NET, SQL Server, Java Script, IIS, Java, JSP, Oracle, JBoss, Tomcat, Apache, Struts, XML, Crystal Reports, SOAP, Web Services (ASMX, WSE 3.1), UML, MSMQ

### **LogicaCMG (formerly Great Lakes Technologies Group), Southfield, MI**

Senior Consultant, Technical Architect

*August 1997 – November 2003*

- Technical Architect at a global consulting practice, market leader for technical resources, systems development and project management.
- Responsible for systems architecture, directing business requirements processes, development of coding standards and practices, design and implementation of reusable architectures, system development and implementations, performance improvement strategies and multiple project management for a variety of organizations (international car manufacturers, marketing, publishing and insurance).

Architected a variety of production systems for in-house operations, automotive manufacturing production floor support and Internet based solutions, assisted in account development, recruited multiple technical candidates. Applied following technologies: VB.NET, ASP.NET, SQL Server, Java Script, COM+, MTS, IIS, ASP, Webshpere, Java, JSP, Oracle, JBoss, Tomcat, Apache, Struts, XML, SAP, Crystal Reports, DB2, C++

#### **New Wave Software, Clinton Township, MI**

Business Owner, Lead Developer *April 1994 – September 1997*

- Lead Developer at small consulting practice, local provider of technical resources and systems development.
- Responsible for systems architecture, technology leadership and development for multiple organizations. Developed key components of a multi-million dollar ERP solution for the steel industry. Developed and implemented a variety of plant floor support systems for an international car manufacturer.

#### **Fourth Wave Technologies, Troy, MI**

Developer *February 1993 – April 1994*

- Developer at small business, local provider of shrink-wrapped commercial products, technical resources and systems development.
- Responsible for software development of various applications. Developed key communication components of the company's flagship product (shrink-wrap software, rated #1 by PC Magazine – WinBeep, alphanumeric pager software utilized by Skytel, Motorola and various other organizations)

## **Patents**

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- [System, method and apparatus for conducting secure online monetary transactions](#)
- [Optical Disc](#)

## **Certifications**

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- Amazon Certified Associate Developer, 03/2018
- Amazon Certified Associate Architect, 04/2018
- Microsoft Certified Professional in Analyzing Requirements and Defining Solution Architectures, 05/2000

## **Education**

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- **University of Phoenix** Bachelor's degree in Information Systems Management, incomplete
- **Oakland Community College** Associate's degree in Computer Information Systems
- **Udemy, acloud.guru** Wide variety of courses completed

## **Public**

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- Github Profile: <https://github.com/fszale>
- Published Thoughts : <https://medium.com/@filipszalewicz>
- YouTube Channel: [https://www.youtube.com/channel/UC\\_nYBw5eWF01Hg8ptni-g-g](https://www.youtube.com/channel/UC_nYBw5eWF01Hg8ptni-g-g)
- Consulting Business: <https://www.solidcage.com>