

Michael Ogrinz

Innovation Leader, FinTech



Michael is an experienced senior IT executive who brings productive creative energy and entrepreneurial leadership to all of his teams. His broad technical knowledge and industry experience grounded in a development background allow him to investigate new and innovative solutions while simultaneously focusing on core business deliverables and measurable ROI.

Selected Achievements

An innovator inside and outside the office: Michael is a co-organizer and exhibitor for Connecticut Maker Faire (8+years) and winner of the Qualcomm Invent-off (season 2)

Author of Mashup Patterns (Addison Wesley, Mar 2009). This pioneering text on Robotic Process Automation (RPA) has received critical praise from reviewers at Cisco, IBM, MIT, etc.

Established and led multiple Engineering and Innovation teams responsible for delivering numerous projects with recurring MM in annual savings via both cost reduction and new products

Over 20 years of experience in the financial services industry (Equities, Fixed Income, Risk Management)

Industry recognized speaker on technologies including Robotic Process Automation (RPA), Synthetic APIs, Social Networking, Knowledge Management

Collaborator and mentor for local schools and universities on Innovation and Entrepreneurialism programs

Multiple patents (30+) and publications across a variety of topics and disciplines

Objective

Senior IT leader seeking a Chief Innovation Officer or similar position where I can apply my technical, motivational, and mentoring skills to guide a team to consistently produce innovative products and strategies.

Experience

Bank of America, New York, NY

2015 -2022

Senior Vice President, Research and Innovation

Lead the Global Information Security Research and Innovation team (50+); responsible for providing solutions across a spectrum of business areas (not strictly cybersecurity-related). Delivered projects with impact at the enterprise level (250K+ employees)

- Established the Innovation Pipeline which supports the introduction of new and disruptive plans and products. The Pipeline encompasses all stages of ideation from collecting and cataloging new ideas up to the delivery of practical solutions with measurable ROI.
- Responsible for creating and executing an annual "Innovation Roadmap" to direct where the team will focus its efforts. The roadmap is broadly divided into three areas: Internal challenges, external opportunities, and "moon-shot" projects. Each project is prioritized in conjunction with the firm's tactical & long-term business goals.
- Established multiple internal forums and conferences to promote innovation and collaboration among individuals and teams. Oversaw numerous hack-a-thon and similar events to spur new idea generation.
- Cultivated relationships with senior leaders to ensure a smooth/stable hand-off of new solutions into the existing operational model
- Responsible for creating governance models for emerging technologies (including Robotic Process Automation (RPA) and Robotic Desktop Automation (RDA) solutions)

Recent projects:

- Researched and briefed senior executives on the impact of quantum computing's on AI/ML, cybersecurity, and quantitative finance.
- Responsible for the development of MAGE (Multiple Attack Graph Engine). The ability to map known attack trees and analyze them (according to the MITRE ATT&CK framework) helps connect the efforts of multiple Hunt and Response teams via an interactive graph-based interface (backed by graph and relational databases). (Patent filings P8696-US, P8669-US, P8430-US)
- Responsible for the development of an automated Access Request Management platform which uses Robotic Process Automation (RPA) to replace the work of human provisioners who previously manually handled hundreds of thousands of tickets to permission access. The resulting solution reduced headcount, eliminated human error, and resulted in quicker provision and deprovision times.
- Created a solution to leverage internal data lakes to discover and mitigate risks related to the unmonitored use of external APIs in production applications. Undiscovered, this usage undermines the security of the Bank's ecosystem by effectively delegating the validity of data to external parties under no legal obligation to the Bank.

Senior Vice President, Infrastructure Innovation Team

2013-2015

Responsible for the Global Infrastructure Innovation Team. This group creates unique platforms and services specifically targeted toward developers to help them achieve their business objectives. Responsible for 12MM in annual saves tied directly to new products and strategies

- Created multiple tools to streamline employee productivity and collaboration.
- Provided oversight on multiple internal working groups and governance bodies to set the strategic direction of IT
- Implemented an enterprise-wide analytics platform to provide insight into user behavior and application usage to enable better usage of manpower and budgets
- Architected and built out a central service catalog for procuring various IT products and services. The application uses RPA/RDA to seamlessly combined disparate external and internal solutions. Innovations include allowing users to transparently requisition items across back-end services, and create cross-catalog bundles for frequent re-use (US Patents 10055770, 9830640, 9824378)

Principal Architect, Architecture and Innovation

2007-2013

Responsible for the Global Markets Architecture and Innovation team. This team defined common architecture platforms, deployed enterprise-wide collaboration tools, and implemented a shared global development ecosystem. Delivered projects with cumulative recurring saves of 35MM.

- Direct team's annual budget and spin up federated workgroups to evaluate and incorporate new technologies into mission-critical systems
- Delivered the Community Oriented Development Ecosystem (CODE) project described by the Global Markets CTO as "the center of how we do business". CODE is a custom DevOps platform that exposes over 1MM internal source files for search, reuse, and peer review across the enterprise. The repository is used to perform impact analysis on applications as well as identify "worst practices" such as embedded passwords and security vulnerabilities.
- Implemented an enterprise-wide wiki and pushed adoption past 90,000 users internally, which resulted in more cross-team collaboration and knowledge transfer

Vice President, Research and Development

2005-2007

Founding member of the Global Markets Research and Development team. Delivered projects with a cumulative recurring save of 10MM.

- Led a federated team of 200+ application developers across multiple lines of business to establish comprehensive enterprise User Interface guidelines which led to increased usability, re-use, lower support costs, and enhanced internal developer mobility
- Created a set of core service APIs to enable collaboration between business areas
- Led Enterprise Architecture's research of "Mashups" (RPA/RDA), and then worked with multiple teams across LOBs to conduct multiple pilots to illustrate the value of this technology to the Bank.

Goldman Sachs, New York, NY

November 2004 – May 2005

Senior Technologist

- Led participatory design sessions in the Market Risk area with the ultimate goal of delivering a suite of world-class applications to the firm's strategists using proprietary SecDB and Slang technologies
- Promoted best practices for application architecture usability

UBS, New York, NY

January 2004 – October 2004

Senior Technologist

Team Lead and Senior Architect for the Equity Derivatives team (200+ people). Responsibilities include management of this area's major deliverables for internal and institutional clients. Facilitated the migration of all preexisting products for this business area from a Solaris & Apache/JRun environment to Linux & Apache/Tomcat. As the manager of this project (50+ people), directed team to perform major refactoring to mitigate numerous application weaknesses.

- Movement away from a code-heavy (Model 1) JSP implementation to a more scalable and maintainable MVC architecture
- Introduced Application-level services such as Connection Pooling, Logging, Charting, and Configuration Management
- Through migration to XML and XSQL across multiple modules to avoid previously brittle inter-system dependencies
- User Interface and database enhancements designed to enhance this business area's award-winning institutional site.
- Designed a façade to allow 3rd-party hosted sites to access internal resources via Java-based Oracle stored procedures.
- Mentored team members to institute best practices for development and deployment tasks.
- Led a team (25 people) that architected and delivered mission-critical database infrastructure related to the firm's portfolio reporting requirements
- Responsible for implementing user-centered design and usability testing methodologies during a migration of this area's award-winning web site.

Published Author

Mashup Patterns

(author), Addison Wesley Professional, 2009

The pioneering text on Robotic Process Automation (RPA), and Robotic Desktop Automation (RDA)

"..inspiring examples, clever ideas, and new ways to use the data already hiding in your business and in the Web around you" – Rob Miller, Associate Professor of Computer Science, MIT

"No organization or developer thinking about the future of enterprise development should miss this book" – John Musser, Founder, ProgrammableWeb.com

Fast Track to Innovation

Qualcomm Developer Network

"..the best tips and takeaways recommended by these visionary developers to kick start innovation and maintain your competitive edge"

<https://developer.qualcomm.com/ebook/fast-track-to-innovation>

Web 2.0 Fundamentals,

(contributing author), Jones and Bartlett Publishers, 2011

"with AJAX, Development Tools, and Mobile Platforms"

Television

Qualcomm Invent-Off (Season 2) - 2016

Winner of Season 2 of the Qualcomm Invent-Off

<https://developer.qualcomm.com/invent-off-season-2>

Teams competed in an intense 3-day session to use IoT and Cloud technology to "save a life". These episodes provide an inside-view of how I collaborate and focus while dealing with the pressure of tight deadlines and limited resources

[Click here for episodes](#)

Alliance Bernstein, New York, NY October 1996 – December 2003

Project Manager/Senior Architect

Hands-on Project Manager (50+ staff) in the Global Equity and Fixed Income divisions, responsible for the architecture and successful implementation of several mission-critical business applications. Mentored staff on software development and related issues including application and database architecture, patterns, testing, and deployment strategies. Leveraged new technologies to turn existing 'systems-based' management methodologies toward a 'business-centric' perspective.

- Project Manager and architect of FIRM (Fixed Income Ratings Model). FIRM allows Fixed Income research analysts to apply proprietary financial models to private and public corporations to discover under/overvalued issues in advance of the general market
- Architect and lead developer of OMS (Order Management System). OMS is the primary global equity trading system used by Alliance Capital. OMS is designed to run 24/7, supporting the entry of domestic and foreign equity orders across multiple trading desks (New York, London, and Tokyo).
- Robust implementation of trading functionality which includes the ability to auto-allocate fully executed orders, create leaves, enforce account restrictions and compliance rules, allocate shares pro-rata, cancel and rebook trades, and print trade tickets
- Designed APIs to allow other in-house applications to easily interface with OMS and add native trading capabilities
- Designed extensive reporting capabilities to review positions, search historical transactions, create trade tickets, audit account activity, and address compliance requirements
- Directed implementation of adaptor classes that allow OMS to interface with back-office accounting and reconciliation systems (e.g., DTC, OASYS, SWIFT)
- Responsible for comprehensive QA, Disaster Recovery, Business Resumption, and Implementation plans
- Project Manager and lead designer of tradeWIRE. This web application provides global ad-hoc reporting and analysis capabilities to Traders, Portfolio Managers, and Compliance Officers. Report definitions are database-resident, allowing for intraday deployment of new or modified templates.
- Architect and manager of PMV (Portfolio Management Viewer), a portfolio management application. PMV provides Portfolio Managers with extensive information required to manage accounts, allocate assets, generate orders, and review historical transactions.
- Architect and Developer, Market Activity Calendar (MAC). MAC is a C# / .NET application that embodies a complex rule-driven "market holiday" engine and a collection of Web Services. The system can calculate bank and market holidays for multiple countries as well as verify valid business dates. Web Services expose this functionality to a variety of downstream systems to ensure their correct operation.
- Architect and Manager supervising the construction of DPV. DPV is a core component of Alliance Capital's Fixed Income message tier. DPV is responsible for populating, validating, and translating instrument records across various internal and vendor products.
- Served as a senior manager/mentor to expedite the build of a Global Optimizer for the emerging algorithmic trading business by designing and implementing system-critical functionality. Educated team members on Design Patterns and development Best Practices.

Credit Suisse First Boston

July 1995 – October 1996

Senior Technologist

Managed an 8-person team responsible for delivering client/server solutions to the Credit Request team

- Architect and developer of CRC (Credit Control), which automates all credit requests in Credit Suisse - North America (CSNA) and tracks over two hundred million dollars of exposure. Features include a sophisticated OOP design, customizable workflow engine, ad-hoc query and reporting, and full auditing capabilities
- Designed and implemented a replication module to synchronize the corporate customer database across multiple Sybase servers.
- Designed a generic application framework to support internationalization across global offices.
- Designed and implemented tools to organize and archive SQL scripts for batch execution against a production environment.
- Implemented application and object level version control procedures for developers

Education

B.S., Computer Science
University of Scranton, 1991

M.S., Computer Science
Georgia Institute of Technology
(est. 2023)

Organizations

New York CTO Club, an invitation-only assembly of technology executives from firms in the greater NY area. Members consist of senior staff drawn from a diverse collection of influential firms in the New York metro area. Michael was invited based on his IT expertise and perspective on a broad range of technologies. The group meets monthly and corresponds frequently about emerging technologies and their related management challenges.

CT CTO Club (founding member)

Treasurer, Remarkable Steam (remarkablesteam.org) – 501(c)(3) An organization that promotes innovation and creativity in the areas of STEAM (Science, Technology, Engineering, Arts and Math). We focus on support for education and job creation. Our flagship event is Maker Faire Westport, the largest single-day event in Connecticut.

NYC Chapter of the Usability Professionals' Association.

Association of Computing Machinists (ACM), IEEE

Fu Associates, Ltd, Arlington, VA

May 1991 – June 1995

Senior Software Engineer

Severed as the technical lead and liaison on multiple MM projects for agencies of the US Government

- Technical lead for the design and implementation of the Airways Facilities Training Planning System (AFTPS) for the Federal Aviation Administration (FAA). The application predicts manpower and training requirements for the FAA on a national level. Deployed at the national level for all FAA offices.
- Assisted in the design and implementation of the Elective Surgery Algorithm Project (ESAP) for the Health Care Financing Administration (HCFA). Designed and implemented 'inference engine' to dynamically edit, test, and process rules.
- Object-Oriented Design and Optimization consultant to the Pension Benefits Guarantee Corporation (PBGC). Utilized extensive knowledge of C++ and C to enhance code performance. Designed and implemented extensible classes for financial computations.
- Assisted in the design and implementation of the Uniform Clinical Data Set (UCDS) for the Health Care Finance Administration (HCFA). The application intelligently collects medical information from doctors as part of the process of forming an electronic patient-record. The patient-record is then evaluated via an inference engine to determine the appropriateness of care given.
- Assigned to support the application requirements of the FAA Human Resource Department. The team is responsible for the development and management of a strategic human resource planning system in support of the FAA's new air traffic control system
- Designed and implemented the Staffing and Training Analysis Requirements System (STARS). The application allows ad hoc queries of various personnel data.
- Co-Designed and implemented the HR Pipeline System, which projects human resource requirements into the future based on current resource information.

Localendar.com, Easton CT

November 1999 – Present

Architect / Founder

- Architect and developer of localendar.com, a web-based group productivity site providing calendaring, task management, discussion boards, reminders, and other groupware
- Average 2.6MM page views and 400,000 unique visitors per month. Average 10,000 concurrent sessions.
- Over 500,000 primary users.
- In the top 1% of sites for Google page views/ad placements
- US Patent 7970751 "System and method for performing local searches across user defined events"

Excelsior Software, Sussex, NJ

June 1985-May 1991

President / Founder

As an entrepreneurial High School/College student, managed a team of developers creating commercial software products

- Applications included a Color Graphics Emulator (CGA) for monochrome-based PCs (Sim-CGA), the first Expanded Memory emulator for the x86 platform (Sim-EMS), a customizable application launcher (Point & Shoot), and a small-business Point-of-Sale program (POSSE)
- Oversaw full product development lifecycle from initiation to completion. Products featured in Compute! and Home Office magazines as well as John Dvorak's syndicated Tech Talk column.
- Site-licensees included Novell, IBM, Sears, and the European Space Agency (ESA).
- Designed packaging, advertising, and promotion strategies. Managed royalty payments to development teams

Patents

Patents/Patent Applications

<https://patents.justia.com/inventor/michael-ogrinz>

<https://patents.justia.com/inventor/michael-emil-ogrinz>

Grants

- Aggregated sentiment analysis system for threat protection, US Patent No. 11397860
- Augmented reality dynamic authentication for electronic transactions, US Patent No. 11288679
- Augmented reality dynamic authentication, US Patent No. 10586220
- Automated application deployment based on server utilization, US Patent No. 9692818
- Automated budgeted transfer process for linked accounts, US Patent No. 9691058
- Cognitive automation-based engine to propagate data across systems, US Patent No. 11252249
- Control device for aggregation and distribution of machine-initiated resource distribution, US Patent No. 10127400
- Cybersecurity threat detection and mitigation system, US Patent No. 10862926
- Dynamic replacement and upgrade of existing resources based on resource utilization, US Patent No. 10439913
- Facilitating network security analysis using virtual reality display devices, US Patent No. 10999313
- Hybrid graph and relational database architecture, US Patent No. 11334626
- Intelligent resource procurement system based on physical proximity to related resources, US Patent No. 10524268
- Isolating and disabling unauthorized applications, US Patent No. 11134062
- Just short of identity analysis, US Patent No. 11316881
- Method for tracking differences between production and development databases to perform an automatic synchronization, US Patent No. 9740760
- Methods and apparatus for a multi-graph search and merge engine, US Patent No. 11354325
- Mobile application access control, US Patent No. 8931050
- Optimization of the isolation and disabling of unauthorized applications by detection of false positives, US Patent No. 11258768
- Optimizing authentication and management of wireless devices in zero trust computing environments, US Patent No. 11381972
- Predictive analytics for resource development based on information communicated from inter-related communication devices, US Patent No. 10334462
- Process for reporting and remediating application development standards, US Patent No. 9171148
- Processing system for providing enhanced reality interfaces at an automated teller machine (ATM) terminal platform, US Patent No. 10916105
- Reflexive benign service attack on IoT device(s), US Patent No. 10771502
- Remote document execution and network transfer using augmented reality display devices, US Patent No. 10979425
- Robotic process automation resource insulation system, US Patent No. 10659482
- Security implementation for resource distribution, US Patent No. 10063438
- System and method for leveraging micro-expressions of users in multi-factor authentication, US Patent No. 11361062
- System and method for performing local searches across user defined events, US Patent No. 7970751
- System for aggregated machine-initiated resource distribution, US Patent No. 10038607
- Systems and methods for requesting and delivering network content, US Patent No. 8527582
- Unified product catalog data retrieval and modification, US Patent No. 10055770
- Unified product catalog orders, US Patent No. 9830640
- Unified product catalog, US Patent No. 9824378
- Virtual reality dynamic authentication, US Patent No. 10311223

Applications

- Identifying users of interest via electronic mail and secondary data analysis US20220164358
- Engine to Propagate Data Across Systems US 20220086250
- Electroluminescent Panels Adaptable for Electronic Devices, US20120182745A1

Speaking

Speaking Engagements

(Conference presentations, webcasts, etc)

- Robotic Process Automation: The Promise, the Patterns, and the Pitfalls (O'Reilly)
- AnDevCon - Android Developer Conference (Panelist)
- SQL NYC: Building unique datasets and products with synthetic APIs
- Kofax Transform: Rethinking Data Integration with Synthetic APIs
- Enterprise Mashup University: Understanding and Applying Enterprise Mashup Value to Business
- Building Enterprise Mashups O'Reilly Web 2.0 New York
- A Roundtable of Patterns Experts
- Developing a Corporate Strategy for Windows 7
- Mashup patterns for your business
- Enterprise Mashups Enterprise 2.0 Boston

Press

Press

- Maker Faire history (Radio interview)
<https://www.youtube.com/watch?v=4GlfwuNIFYU&t=1195s>
- Co-Founder Of Westport's Mini Maker Faire Uses Drones To Help Snake Victims
Westport Weston Daily Voice 2016
- Why we'll all soon be software developers in one way or another
SmartPlanet Oct 2009
- Open Mashup Alliance sets out to breed ease of apps and data access, portability ZDNet
Sep 2009
- Enterprise mashup proponents start organizing
ZDNet Sep 2009
- Architect Shares His Experience Using Mashups in the Enterprise
IT Business Edge
- Bank of America has itself a "100% nerd"
SD Times, June 2009
- Do You Know the 34 Mashup Patterns?
The Enterprise 2.0 Blog, JackBe May 2009
- Everything You Ever Wanted to Know About Enterprise Mashups...
eBiz: SOA in Action Apr 2009
- Dr Dobb's "This Week's Developer Reading List"
Dr Dobb's Portal, Apr 2009
- 10 Must-Know Topics For Software Architects In 2009
- Dion Hinchcliffe Mar 2009
- Excel, the original (but manual) corporate mashup
ZDNet Mar 2009
- Enterprise architect warns: don't let mashups go the 'Excel' route
ZDNet Feb 2009
- The complex reality of end-user application development
The CIO Weblog Mar 2009
- Rapid web-based app development: good or evil?

Additional Writing

(Blogs, articles, etc)

Selected Blogs and whitepapers:

- Should you consider outsourcing management of public APIs?
SearchSOA, May 2014
- HTML5 or Native Apps? Which is Best?
SearchSOA, Jul 2013
- Innovation competitions: Do they actually spur software innovation?
SearchSOA, Feb 2013
- When do I get to build my own portal?
SearchSOA, Jun 2012
- Will HTML5 applications change enterprise application development?
SearchSOA, Mar 2012
- Where's the ROI in a public API?
SearchSOA, Feb 2012
- Enterprise application mashup orchestration
SearchSOA, June 2011
- Making enterprise applications more mashup friendly
SearchSOA, March 2011
- Mashups and mobile: A match that makes sense
SearchSOA, Feb 2011
- Making the business case for enterprise mashups
SearchSOA, Jan 2011
- Enterprise mashup software: Where are we now?
SearchSOA, Dec 2010
- Web 2.0 Fundamentals (book)
- contributing author, Jones and Bartlett
- Building Enterprise Mashups with Data.gov
SearchSOA, Nov 2010
- Stock Picker Shows the Potential of Leading Indicator Pattern
mashuppatterns.com June 2010
- Can enterprise mashups leverage my firm's existing RSS assets?
SearchSOA, Mar 2010
- Enterprise Mashups on Stage at CeBIT
ProgrammableWeb.com Mar 2009

Writing