# MICHAEL B. KENNEY

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## PRINCIPAL SOFTWARE ENGINEER

Well-rounded, goal oriented, professional software developer with extensive experience planning, developing and implementing a wide variety of solutions for both large corporations and small startups. In addition to being a highly skilled software engineer, specialties include designing both technical and non-technical solutions to meet all types of business needs, crafting and implementing development processes and leading teams to deliver high-quality software. Interested in a software engineering position that makes use of skills developed over years of solving the complex problems that businesses face.

## PROFESSIONAL STRENGTHS

Articulate Communication
Project Planning / Management
Team Building & Leadership
Coaching and Mentoring

DevOps Cloud Architecture Infrastructure Development Microservice Architecture Capacity Planning Object-Oriented Software Design Functional Software Design Secure Software Design Disaster Recovery

#### EXPERIENCE

Validity, Inc., Broomfield, CO – <a href="https://www.Validity.com">https://www.Validity.com</a> **Principal Software Engineer** 

2019 – present

Design and implement microservice architectures to optimize and secure integrations with acquired products and oversee migrations to a virtualized cloud architecture. Create and support software frameworks to simplify building and deploying API microservices, automate CI acceptance testing, and automate metrics reporting. Work closely with Core Operations teams to coordinate workload distribution and optimization in AWS cloud infrastructure. Design and implement RESTful and gRPC APIs for acquired products and coordinate integrations with existing and 3rd party services. Lead development and implementation of software abstractions to ensure quality and security of service implementations and deployments.

- Implemented API authentication gateways allowing uniform authentication and identity management methods across services, applications, environments, and languages.
- Implemented extensive black-box acceptance tests on acquired products to ensure stability and reliability during migration and integration efforts.
- Migrated acquired products to Kubernetes environments and AWS data services.
- Performed code audits and any appropriate updates or refactoring on acquired products.
- Performed audits of applications and services to ensure compliance with company guidelines, secret/password management standards, security standards, etc.
- Developed and maintained Docker, Kubernetes and Vagrant based development environment configurations for teams to mimic stage and production environments when working locally (DNS management, HTTP proxies, environment and service orchestration, etc.).
- Assisted teams new to operating within an AWS/Kubernetes stack (framework implementations and upgrades, container development, deployment issues, troubleshooting, metrics/logging, managing AWS load balancer ingress targets, etc.).

Design and build highly interactive web applications and back-end infrastructure for both internal and external customers. Develop and support CI/CD systems built on Github, Gerrit, Jenkins, Docker, Kubernetes, Helm, Amazon Cloud Services, and custom-built services. Implement automated unit and acceptance testing in an Agile environment, using tools like <u>Codeception</u>, <u>Karma</u>, <u>go test</u>, <u>Selenium</u>, etc. Work with various big data technologies to gain insight into message quality, user behavior and mailbox provider treatment of mail streams. As a core member of the <u>IP Certification</u> and <u>Return Path Platform</u> engineering teams, designed and implemented many core components of the company's email deliverability platform. Contributing member of the Diversity in Engineering, Engineering Architecture, and Engineering Practices councils.

- Designed, developed and implemented many complex systems including the customer facing <u>Email</u> <u>Optimization Platform</u>, <u>IP Certification</u>, <u>Labs</u> and other products, as well as many critical internal tools.
- Advocated adoption of Golang and gRPC technologies, developed frameworks to assist adoption including gRPC-first REST APIs, security best practices (SSL, HSTS, CORS, deny/allow content-types, etc), and tooling (structured logging, log sanitation, application metrics, request throttling, etc.).
- DevOps / SRE roles taking advantage of <u>Jenkins</u>, <u>Docker</u>, <u>Kubernetes</u>, <u>Terraform</u>, <u>New Relic</u>, <u>Helm</u>, etc. in both AWS and our private data centers.
- Secure SSO design, implementation and client integration to support federated IDP and custom services.
- In-depth application architecture design and development including single page apps, REST/gRPC API design, framework development, automated testing/continuous integration, SOC 2 compliance, etc.
- Maintenance of legacy, and current systems in various languages including Golang, PHP, Python, Javascript, Perl, Java, Bash, PL/SQL, Pig, Hive, hBase, etc.
- Extensive <u>Salesforce.com</u> and <u>Salesforce Marketing Cloud</u> integrations including internal tools, 3rd party integrations and secure single-sign on to optimize sales velocity and provide a platform for new services.

Point of Reference, Inc., Denver, CO – <a href="http://www.Point-Of-Reference.com">http://www.Point-Of-Reference.com</a> **Senior Developer / DBA** 

2007 - 2011

Manage existing local and overseas contract-development teams including software oversight. Build and manage an internal development team. Evaluate and improve product security and stability. Ensure high availability of the primary product, a feature rich SaaS platform. Manage and develop against a large (325,000+ line) PHP codebase and all related development projects including application architecture, user interface design, database schema development, development cycle scheduling, use-case requirement development, testing procedures and product deployment. Perform all system administration duties for public-facing and internal production, development and backup servers (RedHat / Gentoo Linux) as well as all corporate database, web, version control, ftp, email and reporting services. Report to the President and CEO.

- Developed and implemented disaster recovery procedures.
- Communicated directly with clients and vendors on all technical issues including data migration, automation, security and services integration.
- Designed and implemented integrations with Salesforce.com using the web-services SOAP API.
- Implemented both SAML compliant and custom single sign-on integrations with multiple vendors.
- Implemented formal requirement development, data management and testing/QA processes, drastically reducing error rates and eliminating 99% of data anomalies introduced by external data sources.
- Designed and implemented a streamlined keyword search engine with advanced filtering for complex data hierarchies.

## ADDITIONAL EMPLOYMENT

 $WebBedlam.com\ Web\ Application\ Development,\ Fort\ Collins,\ CO-{\underline{http://www.WebBedlam.com}}$   $\textbf{Owner}\ /\ \textbf{Operator}$ 

2005 - 2007

Created WebBedlam.com, a web software development company specializing in content management systems, user interface design, data delivery systems and website design solutions.

- Designed and developed a secure content management system for Denver mayor John Hickenlooper's office, facilitating communication between the Infrastructure Priorities Task Force and the Denver community.
- Designed many successful capture and web page campaigns, including database and code development and automated lead delivery to allow clients to follow up on new leads in real time.
- Created new data distribution technologies to facilitate a real-time approach to remote data management for the LeadSender lead distribution network.
- Delivered contact forms, interactive order forms, secure user registration systems, custom database schema and interface design, graphic design, CAPTCHA implementation, PayPal integration and much more.
- Released several proof-of-concept projects including advanced content management and creation solutions, P2P collaboration networks and intelligent UI dynamics.

PhoneBase Research, Inc., Fort Collins, CO – <a href="http://www.discoveryresearchgroup.com">http://www.discoveryresearchgroup.com</a> Manager, Data Services

2003 - 2006

Department head managing a close-knit team of 4 - 8 full time programmers tasked with implementing questionnaires in our various data collection systems and providing nationwide support to call and data centers, delivering 150 - 500 developed and tested CATI programs per week.

- Coordinated corporate and departmental goals increasing and maintaining quality inter-departmental communications fostering a productive team atmosphere across departments.
- Oversaw nationwide technical support, implementing training and processes that allowed a reduction in overall technical support hours by nearly 75%.
- Developed new processes and techniques to increase productivity and product quality, increasing productivity by 400% without increasing the overall employee workload.
- Managed and scheduled all data collection projects ensuring timely delivery of tabulated data.

PhoneBase Research, Inc., Fort Collins, CO – <a href="https://www.discoveryresearchgroup.com">https://www.discoveryresearchgroup.com</a> CATI / Software Developer

2000 - 2003

CATI (Computer Aided Telephone Interview) program developer responsible for coding, testing and implementing projects on tight schedules. Responsible for various software development and maintenance projects using Visual Basic, VBA, PHP, MySQL and shell scripting in both Windows and Unix/Linux environments. Installation and support of large telephony systems. Network installation, support and maintenance for regional call centers and central offices. PC hardware and software installation and support for all locations.

- Successfully provided nationwide technical support to three outbound call centers totaling over 500 employees enabling projects to finish on time and on budget.
- Developed custom reports and applications using various languages and techniques to remove redundancy, increase efficiency and streamline internal processes.
- Developed and implemented detailed campaigns for many high-level clients including Nintendo, Washington Mutual and Texas Health-care Systems.