

CRAIG MCDANIEL

Lead Software Engineer | Engineering Leader | Distributed Systems Expert

cpmcdaniel@proton.me | 502-939-9666

25+ years of experience delivering large-scale platforms, leading engineering teams, and shaping technical strategy across finance, lending, market research, healthcare, and distributed data products. Known for driving modernization, elevating engineering practices, and delivering stable, scalable systems in complex, highly regulated domains. Deep hands-on expertise in distributed systems, functional programming, and cloud architectures, combined with a strong record of mentoring engineers, leading cross-functional initiatives, and influencing organizational direction.

Recent experience with AI-assisted programming.

CORE LEADERSHIP COMPETENCIES

- Engineering leadership & team building
- Technical strategy & architecture governance
- Cross-functional partnership (Product, Compliance, Ops, Data)
- Agile processes & delivery management
- Modernizing legacy systems & platform migration
- Cloud-native systems design (AWS)
- Developer experience, tooling, and productivity
- Technical hiring, mentoring, and performance coaching

TECHNOLOGY EXPERTISE

Clojure, Go, Python, Scala, Ruby, Java • ClojureScript • AWS (Lambda, DynamoDB, SQS/SNS, API Gateway) • Cassandra, Elasticsearch, Oracle, PostgreSQL • Kubernetes, Docker • Distributed systems • Data pipelines & integration • DevOps, CI/CD • Functional programming • VS Code Co-Pilot/Claude/GPT

PROFESSIONAL EXPERIENCE

Dividend Finance (Division of Fifth Third Bank) — Senior Software Engineer / Lead Developer

Remote | 2021–Present

- Lead engineer for the point-of-sale platform supporting residential solar loan origination, driving architecture decisions, delivery planning, and cross-team collaboration.
- Oversaw restructuring of the loan application workflow to support co-borrowers, coordinating across product, compliance, and backend teams.
- Led integration of the front-end platform with Blend and Encompass LOS systems.
- Drove engineering execution for integrations with Recheck API, including SSO and identity verification flows.
- Mentored engineers, improved code quality standards, and influenced DevOps/deployment improvements.
- Early adopter of AI-assisted programming with VS Code Co-Pilot integration.
- Technologies: Clojure, ClojureScript, Re-Frame, Postgres, Docker, RabbitMQ, JWT.

Guaranteed Rate — Senior Software Engineer

Remote | 2020–2021

- Technical lead for the enterprise Data Search Platform powering all loan- and mortgage-related applications.
- Led backend architecture using AWS Lambda, DynamoDB, Elasticsearch, SQS/SNS, API Gateway.
- Designed Real-Time Search Admin Service enabling safe index lifecycle management.
- Enhanced internal DSL for loan data projections; accelerated onboarding.
- Partnered with product, infosec, and compliance to meet regulatory requirements.

DataStax — Senior Software Engineer

Remote | 2015–2020

- Founding engineer for Lifecycle Manager, provisioning & config for DSE/Cassandra clusters.
- Architected configuration “definition file” system supporting 20+ Cassandra releases.
- Co-led provisioning workflows across bare metal, VMs, containers.
- Led containerization strategy for Cassandra Kubernetes Operator team.
- Influenced language choices and engineering practices across subprojects.

Infusion — Senior Consultant, Software Development

Raleigh, NC | 2014

- Selected for MetLife SWAT team modernizing global sales platform.
- Provided full-stack leadership across AngularJS, Java/Spring, REST APIs, MongoDB.
- Improved MetLife's technical interview process; mentored recruiters.
- Drove FP adoption via workshops and presentations.

Deutsche Bank — Assistant Vice President, Software Development

Cary, NC | 2012–2014

- Led dbRiskStore team delivering risk data storage for ~8B measures/day.
- Improved Risk Access Point performance by 60%.
- Maintained and enhanced Fandango (Clojure); zero production defects.
- Led development of Horizon executive dashboard (GWT/Canvas).

Deutsche Asset Management — Assistant Vice President, Software Development

Louisville, KY | 2008–2012

- Led Orchestra Platform, multi-region investment research & portfolio management suite.
- Delivered large-scale data migration initiatives.
- Built real-time analytics ingestion (20–30M analytics/month).
- Introduced Scala/Clojure to improve automation and test coverage.

Appriss — Senior Software Engineer

Louisville, KY | 2006–2008

- Lead developer for MethCheck Compliance Manager used by 6000+ pharmacies.
- Built robust ID parsing engine for magnetic stripe and barcode formats.
- Promoted Ruby adoption; led training with Chad Fowler.

SHPS — Senior Software Engineer

Louisville, KY | 2005–2006

- Led and coached offshore team of 7–8 engineers.
- Delivered shared data services hub integrating healthcare platforms via Spring, Hibernate, JMS, SOAP.

n+1, Inc. — Software Engineer II

Louisville, KY | 2001–2005

- Led development for TraQline market research system.
- Designed XML-driven survey platform (30k+ respondents weekly).
- Built high-performance emailing system (50k+ emails/hour).
- Taught Linux and Java courses.

Internet Tool & Die — Software Engineer I

Louisville, KY | 1998–2001

- Built early web applications in PHP, Python, Java.
- Administered MySQL, Solid, PostgreSQL; managed Apache, Zope, Tomcat.

SELECTED TECHNICAL ACHIEVEMENTS

- Built configuration-diff framework for Cassandra releases (20+ versions).
- Developed enterprise ID parsing system used nationwide.
- Designed DSL for loan data projections at Guaranteed Rate.
- Delivered multi-region, zero-defect Clojure application at Deutsche Bank.

EDUCATION

M.S., Computer Engineering & Computer Science — University of Louisville

B.S., Engineering Math & Computer Science — University of Louisville

SELECTED ENDORSEMENTS

“Craig is the fastest learner and smartest person I know... does whatever it takes to get the job done.” — Matt Mitchell, Appriss

“Brilliant is an understatement. Built systems beyond what we envisioned.” — T. D. Ruth, n+1, Inc.

“Extremely productive polyglot engineer with strong leadership skills.” — Zeashan Pappa, Infusion