

Patrick J. McDonagh

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EXECUTIVE SUMMARY

Experienced engineer with 10+ years designing, scaling, and operating cloud-native and IoT platforms. Proven track record owning critical systems, leading cross-team technical initiatives, and improving reliability, security, and developer productivity. Deep expertise in Go, JavaScript/TypeScript, AWS, Kubernetes, and distributed systems, with strong product intuition.

EXPERIENCE

PwC / Kunai — Senior Cloud Engineer

Jul 2024 – Present · Remote

- Embedded with Capital One's Velocity Black platform, owning data security and privacy pipelines
- Designed real-time detection and mitigation systems for highly sensitive human data under strict latency constraints using OCR
- Led performance and reliability testing strategy for distributed services
- Improved platform security posture via automated secret rotation and hardened workflows

Pepper — Core Services Team Lead / Senior Software Engineer

Apr 2022 – May 2024 · Remote

- Technical lead for core IoT ingestion and API platform used by customer-facing mobile applications
- Owned backend architecture in Go, Node.js, and Protocol Buffers
- Led migration from AWS Lambda to Kubernetes and Knative, improving scalability and cost efficiency
- Established internal developer platform standards via Backstage
- Acted as primary technical partner for product and mobile teams

HSB Meshify — Director of Product / Senior IoT Integrations Engineer

Aug 2018 – Apr 2022 · Remote

- Owned end-to-end IoT product strategy spanning hardware, firmware, cloud services, and analytics
- Designed and launched LTE-M and NB-IoT hardware products
- Led global infrastructure migration to Kubernetes
- Reduced platform downtime from approximately 24 hours per month to under 30 minutes per month
- Balanced technical architecture with customer and business constraints

Henry Pump — Product Manager / Software and Electrical Engineer

Nov 2014 – Aug 2018 · Remote

- Designed control systems and analytics platforms for industrial production environments
- Delivered full-stack systems across embedded, backend, and UI layers

SKILLS AND DOMAINS

Languages: Go, JavaScript/TypeScript, Python, SQL

Cloud and Infrastructure: AWS, Kubernetes, Knative, Terraform, Serverless

Architecture: Distributed systems, event-driven platforms, IoT

Security: Data privacy, secrets management, secure data pipelines

Controls and Physical Systems: PLC and industrial automation systems; HMI and SCADA design and implementation; real-time and safety-critical system constraints; hardware-software integration, field reliability, and remote monitoring

Leadership: Technical strategy, cross-team collaboration, mentorship

EDUCATION

B.S. in Electrical Engineering

University of Missouri, Columbia · May 2011