COLIN CAMPBELL

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Versatile Software Engineering Leader with 20+ years of expertise in shipping full-stack software products. Dedicated to cultivating talent and creating an environment where individuals have fun and thrive. Skilled at guiding cross-functional teams to achieve measurable success while fostering a culture of trust, creativity, and continuous growth.

Software Development • Platform Engineering Team Building • Analysis & Design * Strategic Planning • Process Optimization • Software Design • Continuous Improvement • Application Development • Coaching & Mentoring • Product Development • Backend Engineering • Infrastructure • Automation • Code Quality • Project Roadmaps & Delivery

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PROFESSIONAL EXPERIENCE

TUCOWS INC, Toronto ON, 2015-2024
Director of Engineering, Platform Architecture

- Responsible for strategic planning of Wavelo platform Architecture.
- Led a team of 34 engineers, managers and product managers.
- Designed and implement implemented Wavelo's event driven microservice architecture. [Openstack, Terraform, Kafka, Nomad]
- Partnered with engineering teams to provide technical guidance on system architecture trade-offs, balancing performance, reliability, and maintainability.
- Ensured fault tolerant high availability for 8 million BOOST subscribers. [Openstack, Terraform, Grafana]
- Collaborated with other department leads to deliver on strategic initiatives.
- Led an observability transition from Datadog to Grafana saving +$10M in operating costs.
- Delivered self-service platform tools allowing internal engineering teams to opt-in to platform services while they focus on their business initiatives.
- Secured $2M with Scientific Research and Experimental Development (SR&ED) Tax Credit.
- Designed and engineered Wavelo event gateway to manage ingress of millions of daily customer requests. [Typescript, Redis, Kafka]

Engineering Manager, Tucows Domains (2017-2021)

- Responsible for both the OpenSRS UI Hover engineering teams [Rails, React].
- Managed cross-functional collaboration and project delivery.
- Took a hands-on approach coding & leading teams of 4-6 people.
- Led technical discussions and design reviews, guiding engineers through complex trade-offs in distributed system design.
- Provided Kafka event driven reference architecture and migration plan to modernize OpenSRS. [Python, Perl, Kafka]
- Manged Hover beyond the 2 million domains under management milestone.
- Rejuvenated Hover background processing with Sidekick.
- Modernized CICD pipelines from Jenkins to github actions
- Delivered modern domain admin tooling with Vuejs.

Senior Software Engineer, Tucows Domains (2015-2017)

- Delivered key frontend components for GDPR readiness [Perl, Vuejs, React].
- Provided timely improvements to aging SOLR implementation.
- Contributed to the OpenSRS Domain Platform migration, enabling Tucows to integrate millions of domains from acquisitions like MelbourneIT and ENOM [Python, Perl].

- Worked with the Automattic team on the PHP OpenSRS toolkit leading Tucows to acquire Millions of WordPress.com domain registrations from GoDaddy.
- Led engineering efforts for ongoing improvements and modernization of the OpenSRS platform.

FIRE ENGINE RED, Philadelphia PA, 2012-2015
Senior Software Developer, Student Search

- Focused on developing solutions to help America's colleges and universities connect with prospective students.
- Played a key role in delivering a CRM-based admission and alumni search solution. [PHP, Symfony, Laravel]
- Leveraged Apache Solr to provide real-time, multi-user search capabilities and decision-making.
- Provided guidance and leadership on testing & refactoring of legacy codebase.

MEDICAL PHARMACIES GROUP INC, Pickering ON, 2003-2012
Senior Software Developer, Pharmacy Engineering

- Led a small, focused team of 3 engineers dedicated to improving patient outcomes.
- Relied on automation to maintain efficiency and maximize impact with limited resources.
- First to market on innovative mobile pharmacy interaction tools. [PHP, Javascript]
- Delivered a patient aware drug inventory system servicing thousands of beds that drastically reduced medication errors and pharmacy waste. [C++, GTK]
- Implemented a highly available data warehouse solution across 30+ retail locations, providing the organization with much needed business and patient care insights. [VMware]
- Maintained operational redundancies with hardware and software. [Perl, VMware]

FORMAL EDUCATION

Seneca College of Applied Arts and Technology
Computer Programming and Analysis

CERTIFICATES
Applications Developer
Internet Specialist

TECHNICAL SKILLS
Python • JavaScript • Node.js • Perl • PHP • C • BASH • Django • React • Vue • HTMX • PostgreSQL • MySQL • Redis • CI/CD • Git • GitHub Actions • Jenkins • Kafka • Terraform • Kubernetes • Docker • Nomad • Consul • Vault • Elasticsearch • Kibana • Fluentd • Prometheus • Grafana • Unix • Linux • OpenStack • DigitalOcean • AWS • GCP