

Cody Nicoll

Senior Backend Engineer | Product Systems & Integrations

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PROFESSIONAL SUMMARY

Senior backend and full stack developer with 20+ years of experience designing and shipping large-scale web applications, microservices, and distributed systems. Currently applying that depth to AI-powered production systems — including data extraction pipelines, workflow automation, and LLM integration. Experienced technical leader and mentor with a track record spanning high-traffic consumer products at Electronic Arts through to developer tooling and non-profit sectors.

CORE SKILL SET

Backend Systems & Architecture API design and system architecture, database schema design and data modeling, GraphQL and REST APIs, background job processing and queued workflows, performance troubleshooting

AI & Applied Language Models Production LLM integration, context and prompt engineering, RAG pipelines, structured data extraction, AI agent development, n8n automation workflows

Integrations & Data Pipelines External provider integrations, document ingestion and parsing, automated data import systems, event-driven processing

Sensitive Data & Compliance Experience working with sensitive data, auditability requirements, and data residency considerations in production systems

Cloud & DevOps AWS (EC2, RDS, S3, Cognito, DynamoDB, CloudFront), GCP, Docker, Kubernetes, CI/CD, Nginx, monitoring and deployment pipelines

Languages & Frameworks Ruby on Rails, Node.js, Python, PHP, Java (Play Framework), React, Next.js, TypeScript

Databases PostgreSQL, MySQL, MongoDB, Redis, DynamoDB, Supabase, Memcached

Engineering Practices Code review, mentoring, testing, technical design reviews, security reviews, agile collaboration

EXPERIENCE

Senior Software Developer | Ocupop

2019 – Present

- Designed and implemented backend systems that process unstructured documents and produce structured data for reporting and compliance workflows.
- Built production data extraction pipelines used by analysts and stakeholders to evaluate suppliers and opportunities, integrating language models as part of the core workflow rather than as research tooling.
- Led context design and structured data extraction systems using Claude, OpenAI, and other AI model providers.
- Built automation pipelines with n8n connecting AI-powered data extraction into end-to-end production workflows.
- Developed APIs and services using Python, PostgreSQL, and Supabase with React and Next.js frontends.
- Managed AWS and GCP infrastructure including deployments, monitoring, and operational support.
- Designed auditable database schemas and reporting structures for traceable decision-making systems.
- Mentored developers and supported non-profit partners with technical planning and implementation.

Senior Software Developer | Spark RE Technologies

2018 – 2019

- Developed CRM platform features using Ruby on Rails.
- Introduced modern frontend tooling including Webpack, ES6, and React into an existing production application.
- Participated in planning, estimation, and full feature lifecycle delivery.
- Mentored developers, conducted code reviews, and implemented deployment pipelines and stress testing on AWS infrastructure.

Software Engineer II | Electronic Arts

2012 – 2018

- Tech lead on web teams delivering high-traffic releases across EA.com and EA Sports properties including major franchise launches.
- Designed and implemented authentication systems (OAuth 2.0, SSO, TFA) used during large-scale launches.
- Built backend microservices in Java (Play Framework) and contributed to PHP-to-Java migration initiatives.
- Participated in launch readiness, security reviews, and load testing for high-volume production environments.
- Mentored co-op students and junior engineers.

Programmer Analyst | GroupHealth Global

2010 – 2012

- Full lifecycle development of a proprietary billing application using PHP, Symfony2, Zend, and C#.
- Worked directly with operational users to refine requirements and resolve production issues.

Web Programmer / Database Administrator | Harfield & Associates Marketing 2005 – 2010

- Developed and maintained web applications and contest platforms for national clients including Honda Canada and the Vancouver Giants.
- Managed relational databases and collaborated with design teams on client deployments.

Freelance Developer | cNicoll Online | Yunikon

2005 – Present

- Built and maintained custom CMS and e-commerce platforms using PHP, WordPress, and MVC frameworks.
- Built and maintained custom CMS, e-commerce, and WordPress platforms for a range of clients, including multilingual stores with complex pricing and automated product import pipelines.

EDUCATION & CERTIFICATIONS**Certificate in Applied Software Development**

BCIT, 2010

Zend Certified Engineer

License: ZEND018104, 2011