

IDA DE SMET | FULL-STACK SOFTWARE ENGINEER

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ABOUT ME

Results-driven software engineer with 5+ years of experience building scalable, cloud-native applications in high-growth environments. Highly adaptable with a proven record of leading projects and delivering impactful solutions. Strong expertise in Python, TypeScript, React, and AWS, with recent focus on AI.

CAREER HIGHLIGHTS

- ✓ **Lead Software Engineer** for an AI-driven industrial data processing platform; building a scalable ETL platform in AWS utilising AI in Python, and Next.js.
- ✓ **Built mission-critical data infrastructure** for NASA's CAPSTONE mission
- ✓ **Delivered enterprise integrations** (e.g., Teams chatbot) for a SaaS platform serving 100,000+ global users.
- ✓ **Automated large-scale data pipelines** powering over 21 rocket launches and 1,000+ engine tests, reducing reporting time from hours to minutes.

EDUCATION

2014 - 2019 | University of Auckland, NZ, and McGill University, Canada

Bachelor of Engineering (Honours) in Software and Bachelor of Science in Psychology

CORE STACK

- **Languages:** Python, TypeScript, JavaScript, HTML, CSS, Bash, C#
- **Web & API:** React, Next.js, Vue.js, REST, Django, Flask
- **AI & Automation:** OpenRouter, Bedrock, Luigi, TensorFlow
- **Cloud & Infrastructure:** AWS (Lambda, ECS, S3), Pulumi, Vercel
- **Data & Analytics:** MongoDB, Postgres, DynamoDB, GraphQL, Elasticsearch, Grafana, Tableau
- **Testing & Monitoring:** Cypress, Jest, PyTest, DataDog, Cloudwatch

PROFESSIONAL EXPERIENCE

Software Engineer (Remote, full-time contract) - ML4Industry | May 2025 – Present

CTO of an early-stage startup developing predictive AI and ML analytics for industrial sectors.

- Architected and deployed a full-stack, multi-tenant AI predictive platform from scratch, utilizing AWS (ECS, Lambda, S3) and Next.js to support scalable industrial data processing.
- Designed and implemented an automated, flexible ETL pipeline in Python that ingests and processes large-scale industrial datasets, reducing manual data preparation time for clients.
- Leveraged LLM orchestration (via OpenRouter and Bedrock) to automate complex data analysis tasks, improving the accuracy of predictive insights.

Software Engineer (Remote, 10hrs/ week) - Nimble Marketing | May 2025 – Present

- Delivering end-to-end e-commerce solutions, including custom integrations for shipping (Mainfreight), payments (Windcave), inventory management (Unleashed) and CRM (Pipedrive).

Career Sabbatical – Canada | Dec 2023 – November 2025 & Travel | May 2023 – Dec 2023

- Relocated to Canada; completed a planned international sabbatical followed by diverse local work.

PROFESSIONAL EXPERIENCE CONTINUED

Full Stack Software Engineer – Joyous (NZ) | Apr 2022 – May 2023

Enterprise SaaS platform for employee feedback, serving 100k+ global users (Series A US \$10.4M)

- Developed core features with React, TypeScript, and AWS for a global 100,000+ user base.
- Modernized observability infrastructure using Pulumi (IaC), successfully migrating AWS CloudWatch to Datadog; engineered automated alerting.
- Led end-to-end feature builds, including automation of internal workflows.
- Mentored junior developers and maintained engineering documentation.

Operational Data Software Engineer – Rocket Lab USA (NZ) | Oct 2018 – Mar 2022

Aerospace launch service provider specializing in orbital small satellite delivery (US \$4.8 billion at IPO)

- Built Python data pipelines processing 21 rocket launches and 1,000+ engine tests; reduced reporting latency from hours to minutes.
- Developed reusable ETL tooling used by 20+ engineers to time-sync and analyze millions of data points across multiple sources, notably NASA's CAPSTONE mission's propulsion team.
- Stabilised C# WPF and Python analytics pipelines for propulsion systems.
- Delivered Angular-based R&D tools and designed backend data architecture.

Web Developer – Brown University (USA) | Oct 2017 – Mar 2019