## Nicholas Dullam

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## WORK EXPERIENCE

## Senior Software Engineer & Software Engineer II

July 2023 – Present Remote

**Testimonial Tree** 

I led the migration of our core product to a new tech stack, overseeing product strategy, UI/UX design, and engineering – reducing costs by over 10% and consolidating the product into a single, serverless ecosystem to drive developer efficiency and scalability.

- Worked with the Director of Engineering to lead the team, review PRs, and develop scalable DX patterns improving code quality and team efficiency.
- Directed product initiatives and managed UI/UX design to ensure alignment with product goals and consistency across the application.
- Migrated a legacy service to the new application, conducted comprehensive regression testing to ensure stability, and maintained backward compatibility for existing clients.
- Implemented CI/CD pipelines in Bitbucket with Jest and Playwright, automating testing to increase reliability and streamline deployments.
- Collaborated with stakeholders to design and implement retrieval-augmented generation (RAG) integrations, enhancing data discovery for clients.
- Oversaw architectural changes, leveraging background job processing with Trigger to improve application reliability.

Skills – Next.js, Typescript, React.js, Node.js, Turborepo, SQLServer, Redis, Bitbucket Pipelines, Jest, Playwright, Vercel, AWS, Python, LangChain, Llama Index, RAG, Pinecone, Trigger

**Development Lead**Sustainably

May 2020 – Jan 2024

\*\*Remote\*

I built the foundation of our core application, enabling fitness and nutrition tracking, automated meal planning, recipes, and course tool services.

- Launched an MVP with 3+ functional iterations.
- Worked with the Founder to design, develop, and deliver functional requirements.
- Led data-driven customer acquisition funnels, tagging, and admin tooling for churn visibility.

Skills - React.js, Javascript, Node.js, Express.js, MongoDB, Heroku, AWS, Stripe

## **Software Engineer Intern**

May 2022 – Aug 2022

Visa

Highlands Ranch, CO

I handled the middleware team's migration to GCC 7, resolving approximately 800 errors and warnings spanning more than 140 programs across our codebase, with over 96% of critical compile-time errors mitigated.

- Developed effective and scalable C++ solutions for compile-time resolutions.
- Wrote, tested, and loaded code in a TPF production environment.
- Worked alongside Senior Engineers and SMEs for affected programs to configure test plans and review code changes.

Skills - C++, RabbitMQ, TPF

# **VP of Engineering**

Communicode

Aug 2016 – Mar 2018

Westfield, IN

I oversaw the research and development of our machine learning (ML) recommendation processes, with a focus on tailoring developer-to-nonprofit matching.

- Designed profile preference generation and weighting procedures, with K-nearest neighbors (KNN) matching.
- Oversaw development of publish and subscribe methods using Google Cloud Platform (GCP).
- Collaborated cross-functionally to design, develop, and deliver functional requirements to key stakeholders and investors.

Skills - Python, NumPy, PubSub, React.js, JavaScript, Node.js, Express.js, MongoDB, Redis, GCP

#### **EDUCATION**

Purdue University Aug 2019 – May 2023

Bachelor of Science in Computer Science, Data Science, and Applied Statistics

West Lafayette, IN

- Concentrations: Machine Intelligence
- Certificates: Entrepreneurship and Innovation Certificate

## **National University of Singapore**

Jan 2022 – May 2022

Study Abroad Singapore