

Derick A. Gross

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SUMMARY

I am an AI engineer based in NY with experience training AI in code generation, building AI-powered solutions using RAG, and architecting distributed systems using cloud technologies.

EXPERIENCE

AI Engineer, dag.ai 11/2023-present

- As an entrepreneurial software engineer entering AI, I integrate AI models with custom data sets using techniques such as Retrieval Augmented Generation, train AI models in code generation, assess and interview technical experts for AI model improvement tasks, and mentor software engineers through cutting-edge projects and career development.

Product Engineer, Ridgeline 8/2020-7/2023

- Integrated with external vendors to ingest updates to securities, market capitalizations, corporate actions, etc., providing required data feeds for 83% of new customers
- Collaborated cross-team with portfolio accounting on critical API and workflow enhancements that contributed to 1000x performance increase in V2 system
- Eliminated 25% of fixed costs for pipeline testing environments by identifying and removing environments where fixed cost exceeded variable cost with no impact on code velocity
- Implemented site reliability solutions using Datadog monitors integrated with Slack channels and messaging, improving response rate to failures from 3 hours to 7 minutes
- Built reusable relational subquery and query components to replace in-memory data processing, boosting performance ~9x
- Advocated for regular and formal technical design reviews to increase knowledge sharing, decrease re-work, and empower faster and more thoughtful code review
- Designed devops mentoring program to formalize knowledge sharing

Co-Creator and Software Engineer, Apex 1/2020-4/2020 apex-api-proxy.github.io/

- Designed solution architecture, relational table schema, middleware logic.
- Built admin user interface (React) and API (Node/Express)

Instructor Lead - Software Engineering, General Assembly 3/2019-6/2019

- Among other organizations, students I taught and advised have accepted roles at Amazon, Meta, Spotify, IBM
- Instructed 30 students in full stack software development and software engineering fundamentals, including React, Javascript, Ruby and Ruby on Rails, SQL, object relational mappers, Node, Git, database design, API design, HTML, CSS. Had the distinction of teaching General Assembly's first ever Software Engineering Immersive, which included dedicated courses I designed for data structures and algorithms: linked lists, merge sort, etc.

Software Developer, True Earth Health Products 11/2016-3/2019

- Owned websites for five distinct products. Decreased mobile site payload from 10.6MB to 1.6MB, increasing mobile conversion rate increased by 21.9% and adding a projected \$700k in revenue over 5 months

- Built event-sourced workforce management quality assurance app, increasing call center QA efficiency by 45%. Built controller routes, request objects and handlers (command pattern), and event applicators for Audit aggregate. Debugged errors in event snapshot recording from Azure CosmosDB to relational database. Created audit history table using KendoUI, Dapper data access layer mapping, and client views
- Designed and built cloud ETL solution for ingesting Excel spreadsheets, persisting reporting data in relational databases, replacing legacy integration with on-premises database. Built cloud devops dashboard to monitor failures, decreasing response and debugging time by 71%
- Added new dimensions to OLAP cube and created custom PivotTables in Excel for sales floor management team, enabling 200% growth in sales staff with no new management overhead
- Designed and deployed automated vendor report delivery system using Azure Logic Apps, saving three hours per week of developer time
- Migrated on-premises relational database to the cloud, decreasing costs by 65%
- Added custom cross sell and upsell pages to websites, increasing revenue per sale by 3.6%
- Built event-sourced workforce management quality assurance app, increasing call center QA efficiency by 45%
- Interviewed, onboarded, managed and mentored junior bootcamp grad. Onboarded and evaluated new senior developers

Software Developer, Unytus 5/2016-10/2016

- Designed and built MVP of family service sharing app (restricted by NDA)

SKILLS and TECHNOLOGIES

AWS, Python, Azure, Docker, JavaScript/Node.js/Typescript, .NET Core, Ruby/Rails, PostgreSQL, GraphQL, Redis, SSMS, Git/Github, REST APIs, React/Redux, Jira

EDUCATION and CERTIFICATION

- AWS Certified Solutions Architect (Associate) December 2021
- Launch School mastery-based software development (2016 - 2017, 2019 - 2020)
- Columbia University - Chemical Engineering (1999-2004, 20 credits remaining)