# **Improving RAG Applications**

For MIT Generative AI Course

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Independent Consultant

### **Table of Contents**

About Me

# About Me

#### About Me

Goal: To showcase my diverse experience – feel free to ask questions about any area during Q&A

- Independent Consultant & Staff-level ML Engineer & Educator
  - Meta, Stitchfix, NYU from (2016-2023)
- University of Waterloo
  - B.Math in Mathematical Physics & Computational Mathematics
  - Minor in Statistics (Class of 2017)
- Creator of Instructor Python library for structured LLM outputs
  - 9500+ GitHub stars
  - 1.5M+ monthly downloads
  - Cited by OpenAl as inspiration for structured output feature
  - Popular 'Pydantic is all you need' Talk from Al Conference
- a16z Scout & Angel Investor & Startup Advisor

### My Journey

- Transitioned to independent consulting due to RSI (2022)
- Do I want to get 20% of my coding back, or find 100x more leverage?
- Now focused on:
  - Teaching teams to work with AI and be quantitative
  - Writing more 'popular ai' content
  - Advisory work for early stage startups
  - Open source projects, independent research

# Work & Consulting & Advisory Engagements

Client	Contact	Industry
Zapier	VP of Product	Automation
HubSpot	GM	Sales & Marketing
Enterpret	СТО	Analytics
Tensorlake	CEO	Data
Limitless AI	СТО	Al
Trunk Tools	VP Eng	Construction
Naro	СТО	Sales & Marketing

Additionally, I've worked with innovative startups including New Computer, Sandbar, Dunbar, Bytebot, Kay.ai, Raycast, Weights & Biases, Modal Labs, Timescale, and Pydantic on various technical and strategic initiatives.

# Where My Students Come From

Company	Industry	
OpenAl	Al Research & Development	
Anthropic	Al Research & Development	
Google	Search Engine	
Salesforce	Customer Relationship Management Software	
Microsoft	Software, Cloud Computing	
Amazon	E-commerce, Cloud Computing	
Zapier	Automation Software	
Adobe	Software, Creative Tools	
Accenture	Consulting, Technology Services	
McKinsey & Company	Management Consulting	
Bain & Company	Consulting	
PwC	Professional Services	
Cisco	Networking Technology	
Electronic Arts	Gaming	
Shopify	E-commerce Platform	