

Market Mentor

Team Bit Rebels

The Need for an Investment Education Bot



Understanding the Financial Landscape



The Rise of Quick-Buck Gurus



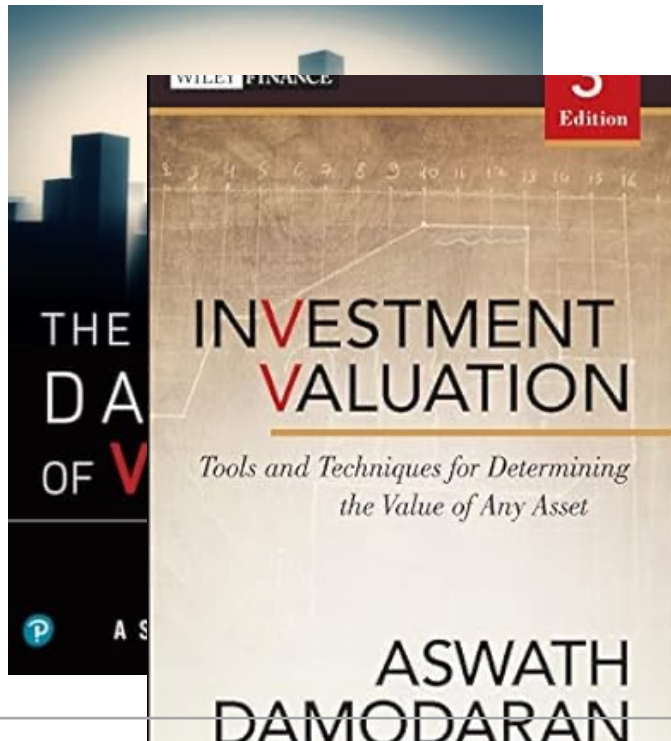
The Role of a Seasoned Teacher



Embracing Financial Literacy

Our Data Sources

Topic	Current data set as html (just US)	Regional datasets (downloadable Excel)	Description	Explanatory Webcast
Corporate Governance	Insider and Institutional Holdings by Industry Sector	<ol style="list-style-type: none"> 1. US 2. Europe 3. Japan 4. Aus, NZ & Canada 5. All Emerging Mkts <ol style="list-style-type: none"> 1. Only China 2. Only India 6. Global 	Insider holdings and institutional holdings as a percent of outstanding stock, classified by industry.	
	Historical Returns on Stocks, Bonds, Bills & Real Estate- United States	Download	Historical annual returns on stocks, bonds, bills & real estate for the United States from 1928 to the most recent year. It is a useful starting point for estimating historical equity premiums.	
	Implied Equity Risk Premiums - United States	Download	These risk premiums are estimated based upon a simple 2-stage Augmented Dividend discount model and reflect the risk premium which would justify their current level of the index, given the cash yield, expected growth in earnings and the level of the long term bond rate.	
	Risk Premiums for Other Markets	<ol style="list-style-type: none"> 1. January 1, 2024 update 2. July 12, 2023 update 	These are risk premiums estimates for other markets based upon the country ratings assigned by Moodys. Starting in June 2012, I also report equity risk premiums based upon CDS spreads, where those are available.	
	Levered and Unlevered Betas by Industry	<ol style="list-style-type: none"> 1. U.S. 2. Europe 3. Japan 4. Aus, NZ & Canada 5. All Emerging Mkts <ol style="list-style-type: none"> 1. Just China 2. Just India 6. Global 	Levered, unlevered and pure play betas by industry. Also includes other risk measures including operating earnings variability and price-based risk measures.	Video Guide



Aswath Damodaran

@AswathDamodaranonValuation · 692K subscribers · 1.1K videos

I teach corporate finance, valuation and investment philosophies at the Stern School of Bu... >

stern.nyu.edu/~adamodar/New_Home_Page/corpfm.html and 4 more links

[Subscribe](#)

Home
Videos
Live
Playlists
Community

Latest
Popular
Oldest

Session 9 (Val Undergrads): More on cash flows
4.6K views · 1 day ago

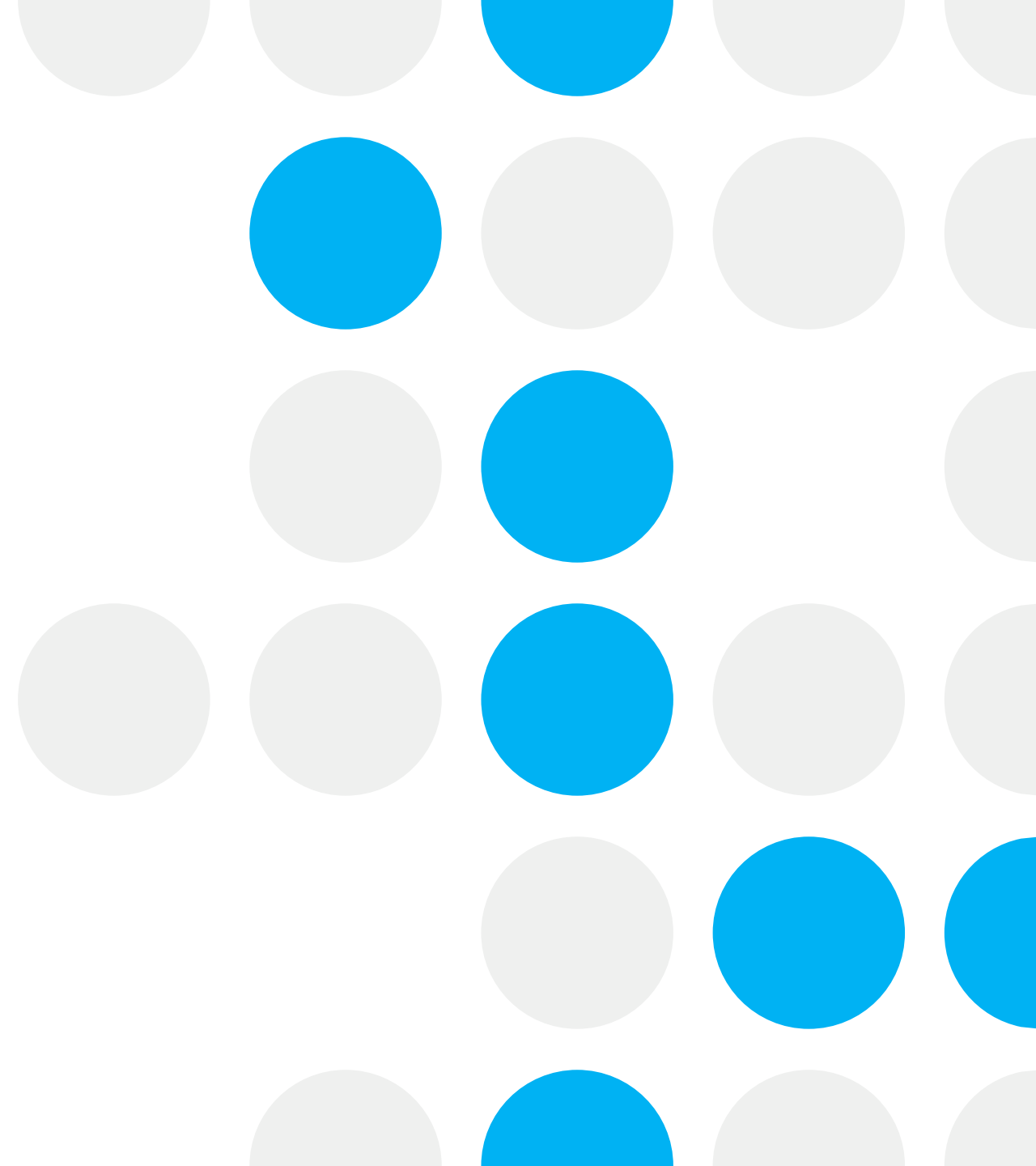
Session 7 (Val MBAs): Cost of Capital Closure and First Steps on...
1.1K views · 1 day ago

Session 7: Implied and Country Equity Risk Premiums
2K views · 1 day ago

Too Big a Risk? Catastrophic Risks in Business and Investing
15K views · 6 days ago

Our Models

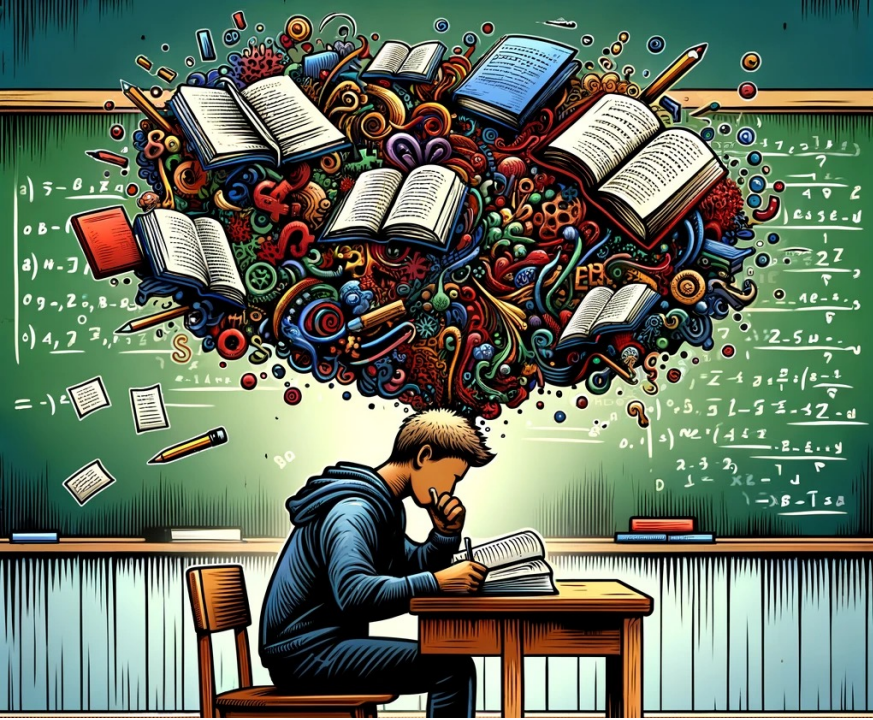
- Vanilla RAG
 - Hyde
 - Modified Hyde
-





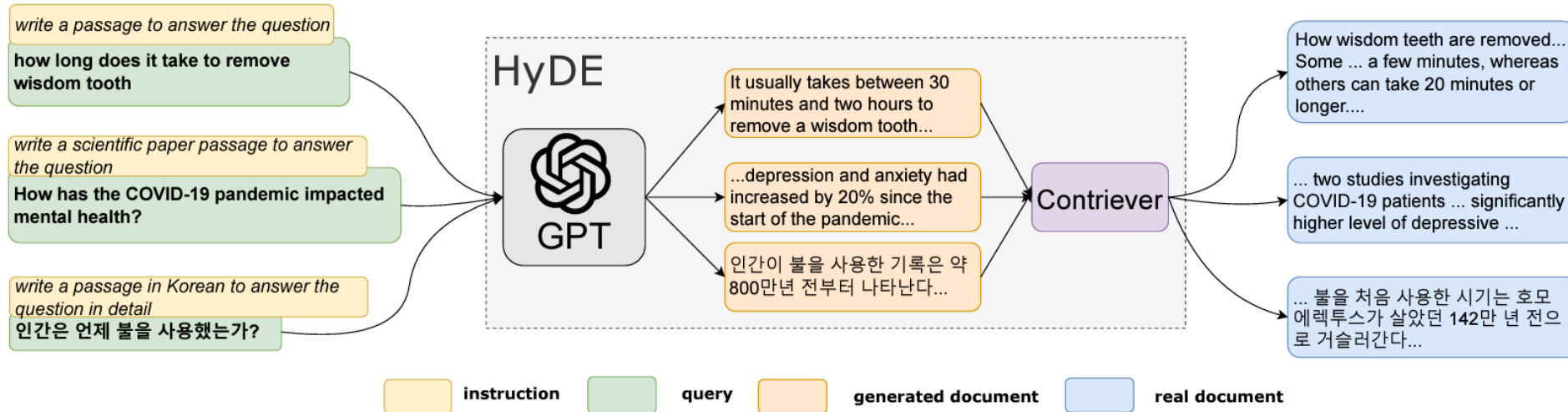
Vanilla RAG

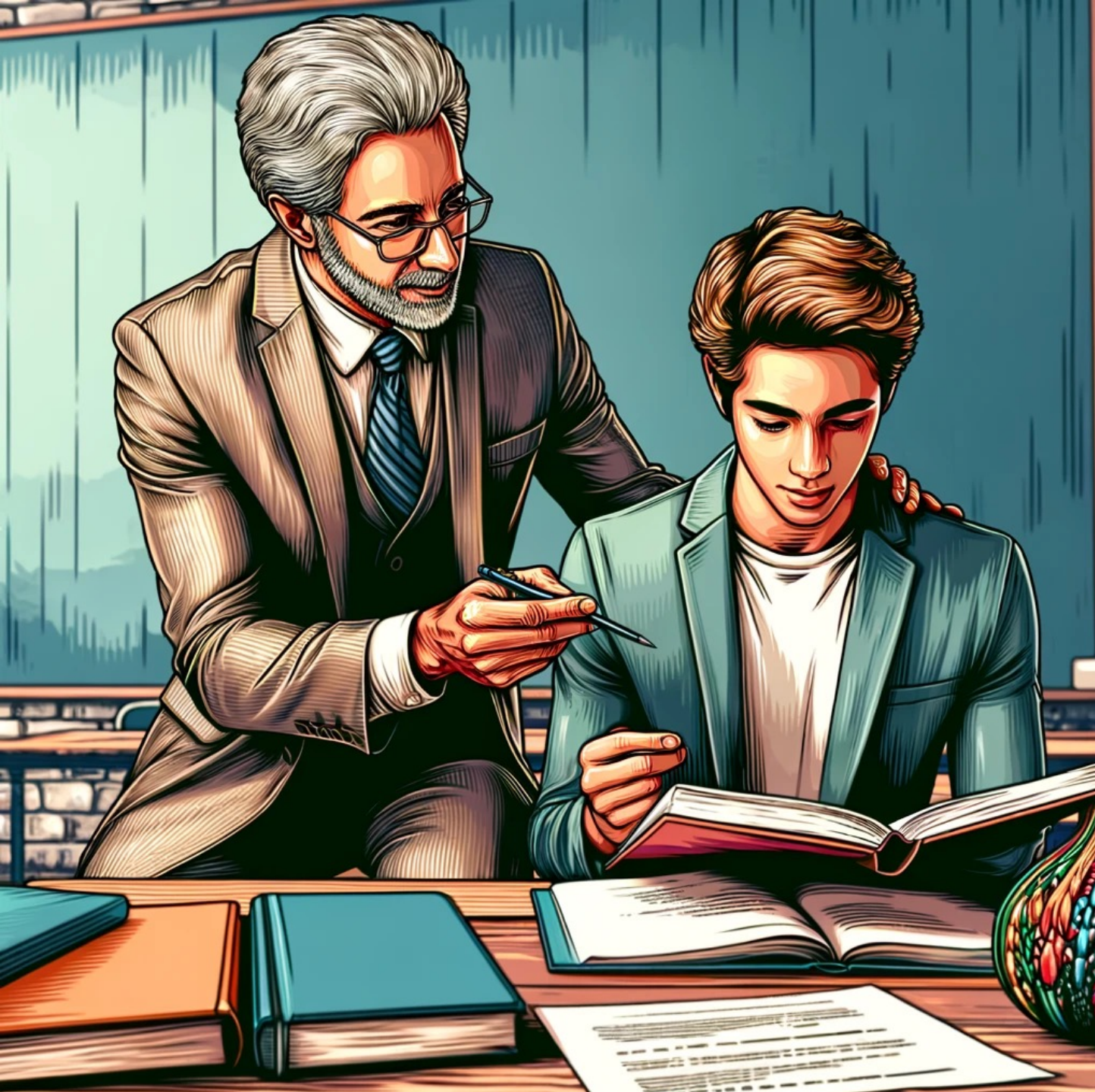
- RAG breaks down to **RETRIEVING** relevant context from our database, **AUGMENTING** our prompt with context and then **GENERATING** the answer.
-



HyDE (Hypothetical Document Embedding)

- In this two-step generation process, we first generate an answer from the model parameters, and then use the embeddings of the hypothetical answer to generate embeddings for the RAG pipeline.





Modified HyDE

In this novel approach, first we finetune a causal language decoder-only model like GPT-2 on our raw dataset, and rather than relying on a Large Language Model, we can generate answer that regurgitates from our database, which can lead to better hypothetical document embeddings for the RAG system.



The benefits of our model

- Personalized Bots.
- Efficient Specialized Small Models.
- Bypasses the need for extensive Q&A data, replicating expert communication styles directly from raw texts for a genuine character model.

Simplifying Microeconomic Analysis with Text-to-SQL



Data Source

Expert Insights: Data from Professor Aswath Damodaran, a finance expert.

Microeconomic Trends: Detailed analysis of market behaviors and indicators.



Innovation

Text-to-SQL Model: Converts plain text questions into SQL queries.

User-Friendly: Designed for easy access to complex data by anyone.



Impact

Ease of Use: Natural language queries eliminate the need for SQL skills.

Efficiency: Quick access to specific data points from large datasets.



Applications

Informed Decisions: Supports data-driven research and strategic planning.

Adaptive Technology: Improves with use, expanding potential applications.

Project Demo

