

Workshop

AI x Financial Analysis: Build psxGPT from Scratch and Modify it

6 August 2025 | 9 AM to 5 PM
Karachi, Pakistan

OVERVIEW

This workshop empowers finance, investment, and business professionals to harness Large Language Models (LLMs) for smarter financial analysis—without any coding background. You'll learn how to build psxGPT, a custom AI assistant that can query and analyze PSX financial filings in plain English.

Through a hands-on approach, you'll discover how to collect and process real-world financial reports, convert them into AI-ready formats, and create a searchable knowledge base using embeddings. You'll also learn how to customize psxGPT to suit your unique research, due diligence, or reporting workflows.

By the end of the session, you'll have a working psxGPT running on your own machine—fully personalized and ready to streamline your financial analysis.

LEARNING OBJECTIVES

- Set up and run psxGPT on your own machine
- Understand how Large Language Models (LLMs) can search and reason over financial filings
- Retrieve and download official reports from the PSX website
- Convert these PDFs into LLM-ready formats, such as Markdown, including OCR processing for scanned documents
- Add structured metadata tags to enhance retrieval and organization
- Build a custom, searchable index using embeddings
- Deploy and configure your own Model Context Protocol (MCP) server and client
- Learn how to adapt and extend this tool for internal data, due diligence, and research workflows

TRAINER



Isfandiyar Shaheen
Core Modeler, AsfiModels

WHO TO ATTEND?

This workshop is for finance, investment, and business professionals who want to understand how large language models (LLMs) can transform financial analysis. You don't need a background in coding or AI

**This workshop qualifies for
6 PL Credits**

COURSE FLOW

9:00 – 10:00 AM

Session 1: Load and Play

- What psxGPT is and how it works
- You'll get your own version of psxGPT running locally
- Start querying real financial data straight away

10:00 – 10:45 AM

Session 2: Environment Setup

- Install Python, PostgreSQL, and package manager
 - Set up the local development environment step-by-step
 - Sign up for required API keys-Gemini, LlamaParse, Anthropic, Mistral
- Credit card required for API setup

10:45 – 11:00 AM

Tea Break

11:00 – 12:00 PM

Session 3: Automating Data Collection

- Use Playwright (headless browser) to fetch PSX reports
- Understand how automation fits into the analyst workflow

12:00 – 1:00 PM

Session 4: Parsing Reports for LLMs

- Convert PDF to Markdown using parsing + OCR
- What makes a document usable for an LLM?

1:00 – 2:00 PM

Lunch Break

2:00 – 2:30 PM

Session 5: Metadata for RAG Pipelines

- Add structure using tags: company, year, report type, section
- Why metadata improves LLM accuracy

2:30 – 3:15 PM

Session 6: Embeddings & Vector Search

- Create a vector index from your data
- Understand how semantic retrieval works behind the scenes

3:15 – 3:30 PM

Tea Break

3:30 – 4:30 PM

Session 7: Build Your Own Query Engine

- Launch the Model Context Protocol (MCP) server
- Create your own MCP client to ask structured questions
- See how each piece connects to create an end-to-end assistant

4:30 – 5:00 PM

Wrap-Up & Q&A

- Recap what you've built
- Explore use cases: due diligence, internal tools, industry reports

TRAINER'S PROFILE

Isfandiyar Shaheen

Core Modeler, AsfiModels

Isfandiyar Shaheen is Core Modeler at AsfiModels where he combines his love of financial modeling and programming.

He is currently serving on the boards of Engro Holdings, DH Partners and Cyan Limited.

He graduated from Franklin and Marshall College with a degree in Economics and Mathematics.



REGISTRATION PROCESS

Kindly fill out the form below or email us at events.registration@cfapakistan.org

First Come First Basis | Limited Seats Available

Deadline to Register:

1 August 2025

Program Fee:

PKR 60,000

PAYMENT METHOD

Kindly ensure payment is made by the registration deadline.

Pay order or Cheque in the name of CFA Society Pakistan, submitted at: : CFA Society Pakistan
1st Floor, 59-C, Al Murtaza Commercial Lane
No. 4, Phase VIII-A, DHA, Karachi.

DISCOUNT POLICY

Member - CFA Society Pakistan*: **PKR 25,000/-**

CFA Program Candidates and Charter Pending*: **PKR 50,000/-**

Group of 3 or more: **15%**

Early Bird Discount: **15%** - (Payment made before 29 July 2025)

* Verification required

ONLINE PAYMENT*:

Account Title : CFA Society Pakistan

Bank Name : Meezan Bank

Account No. : 0135-0107600133

IBAN : PK72MEZN0001350107600133



*(Proof of payment required)

Pls WhatsApp evidence of payment on

+03428230301 or

email at



events.registration@cfapakistan.org

