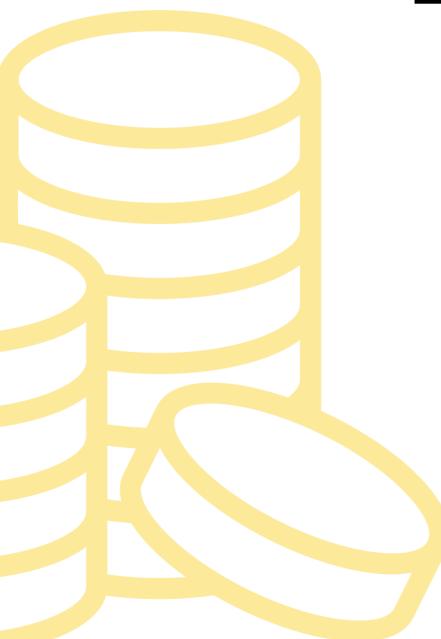


FINE TUNING LLM FOR FINANCIAL ADVISORY



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INTRODUCTION

- Fine-tuning a Large Language Model for financial advisory purposes can significantly enhance the quality, relevance, and reliability of automated financial guidance.
- This process involves tailoring a pre-trained language model to understand and respond to financial-specific queries, ensuring compliance with regulatory standards, and providing accurate and personalized advice.

PROBLEM STATEMENT

- As more individuals and businesses seek personalized financial guidance, traditional financial advisors often face challenges in scaling their services to meet the diverse needs of clients. Additionally, manual advisory processes are time-consuming, expensive, and prone to human error.
- There is a growing demand for automated financial advisory tools that can deliver personalized, accurate, and compliant advice while being accessible to a wide audience.
- Despite the advances in AI, current large language models (LLMs) lack domain-specific knowledge in finance, making their generic responses insufficient for accurate financial advice.

PERSONAL INVESTMENT ADVISORY

FEATURES:

- CASH FLOW MANAGEMENT:
REAL-TIME TRACKING AND ANALYSIS OF INCOME AND EXPENSES.
- TAX PLANNING ASSISTANCE:
OPTIMIZE TAX STRATEGIES AND MAXIMIZE DEDUCTIONS.
- INVESTMENT ADVISORY:
PERSONALIZED PORTFOLIO RECOMMENDATIONS BASED ON RISK PROFILE.

Cash Flow Management

Expense Tracking

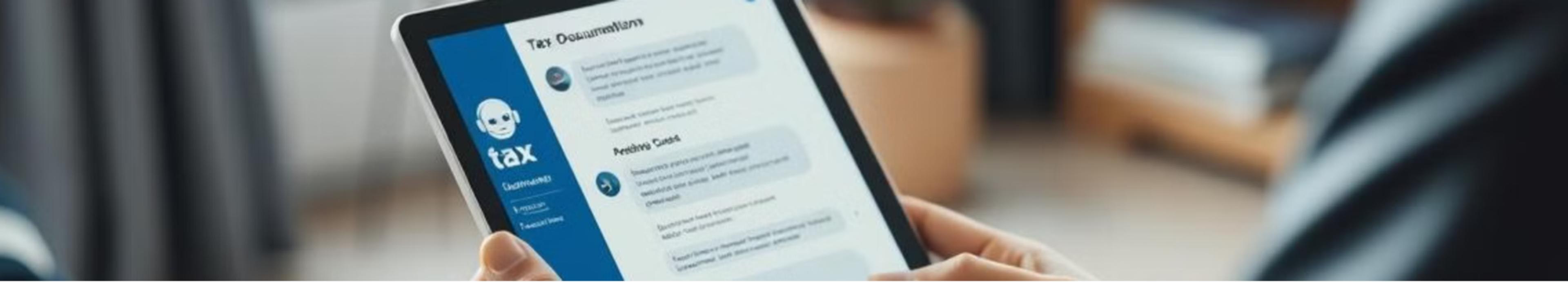
Log expenses effortlessly by category. Monitor your spending habits with ease. Gain insights into your financial outflows.

Income Tracking

Record multiple income sources. Keep tabs on your salary, freelance earnings, and investments. Get a comprehensive view of your financial inflows.

Monthly Overview

Visualize your monthly cash flow at a glance. Identify spending patterns and saving opportunities. Make informed decisions about your finances.



Tax Planning Assistance

1

Income Source Analysis

Organize multiple income streams for accurate tax calculations. Simplify complex tax scenarios with AI-powered assistance.

2

Deductions & Credits

Input relevant data for potential tax savings. Discover overlooked deductions and credits tailored to your situation.

3

Filing Advice

Receive personalized suggestions for optimal tax filing. Maximize your tax savings with AI-driven strategies.



Intelligent Investment Advisory

Goal-Oriented Planning

Define your investment goals and receive tailored advice. Plan for retirement, home ownership, or other financial milestones.

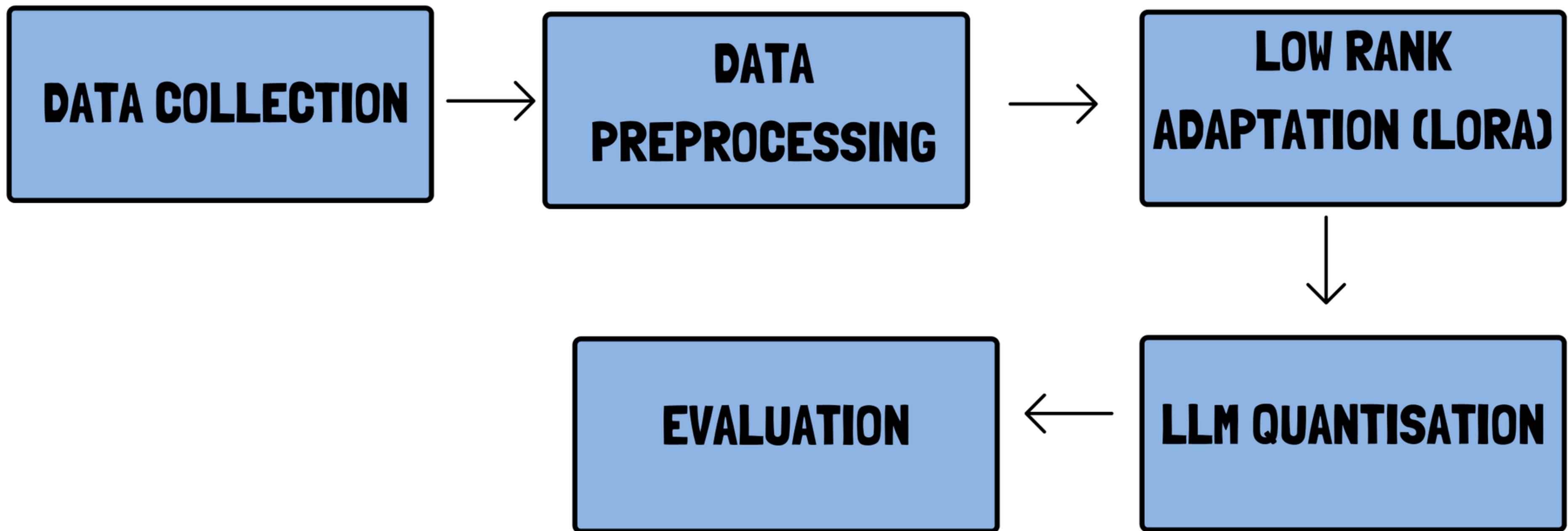
Risk Tolerance Assessment

Identify your risk comfort level with AI-guided questions. Get investment recommendations aligned with your risk profile.

Time-Horizon Optimization

Factor in your preferred investment duration for balanced strategies. Optimize your portfolio for short-term and long-term goals.

METHODOLOGY



1. Data Collection

- Financial-related PDFs
- Challenges: clean, relevant, diverse datasets

2. Data Preprocessing

- Raw Data
- Cleaning
- Normalization
- Tokenization
- Annotation

3. Low-Rank Adaptation (LoRA)

- Adapt existing LLM for Financial-related tasks
- Introduces low-rank updates to weights
- Fine-tuning with minimal base model changes

4. LLM Quantization

- Reduces weight precision
- Faster, efficient inference
- Critical for real-time Financial market

5. Evaluation

Measure performance on financial-related tasks

Accuracy

Precision and Recall

Real time Financial Relevance

Validation