Title

- Internship Presentation
- AI/ML Engineering — Learning Summary
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Python Foundations

- Python basics: syntax, loops, functions, OOP
- File handling, error handling
- Libraries: numpy, pandas, matplotlib
- Mini projects: calculator, CSV analysis

NLP Fundamentals

- Tokenization, stopwords, stemming, lemmatization

- BoW, TF-IDF, n-grams

- Word2Vec, GloVe

- Semantic searching

Sequence Models & Attention

- RNN → LSTM → GRU

- Seq2Seq with attention

- Sentiment classifier

Transformers & Tokenization

- Self-attention, encoder/decoder
- Tokenizers: BPE, WordPiece

LLM Concepts

- Tokenization → embeddings → attention
- Transformer stack
- Training + inference pipeline

Open Source LLMs

- LLaMA, Mistral, Phi-3, Gemma
- Ollama, HuggingFace
- Performance comparison of open-source models

Prompt Engineering & Chatbots

- Zero-shot / few-shot prompting
- Chatbot- Langchain framework
- FastAPI backend

RAG Systems

- Chunking, embeddings, vector DBs
- ChromaDb + SentenceTransformers
- PDF knowledge base bot

Version Control

- Git, Git-remote
- GitHub

Projects

- Expense-Tracker CLI app
- Brick-breaker game (pygame)
- Coderax-Try On (Custom model training)
- ADGM Academy Learning Experience Platform (Feature list creation)
- Woo-try On (current)
- Sales-Agent (current)
- Chatbot Inventory Platform (current)

Conclusion

- End-to-end ML + NLP + LLM exposure
- Practical project experience
- Ready for AI/ML engineer role