# SKANDER TLILI

## Engineering Student in Data Science

Phone : +216 27 028 750
Email : skander.tlili@enstab.ucar.tn
Github : https://github.com/Telliliskander
My website : http://skander.vercel.app

## SUMMARY

Passionate and dedicated engineering student in Data Science seeking an end of studies internship from four to six months or more to complete my academic career.

## EXPERIENCE

### Prompt Engineering Intern
Business & AI

Jan 2023 - Present
Megrine Business Center, Tunis, Tunisia

- Prompt Engineering: Applied advanced techniques to optimize LLM outputs improving accuracy for Generative AI.
- LLM Evaluation: Tested and selected open-source LLMs assessing performance for complex retrieval-augmented generation (RAG) tasks.
- RAG Methodologies: Implemented retrieval-augmented generation approaches to enhance Context Retrieval.
- Reasoning for LLM Agents: Applied diverse reasoning strategies to enable multi-step Decision Making for LLM.
- Q&A Agent Development: Developed a Question Answering agent using RAG techniques to answer questions from PDFs.

### Software Engineering Intern
NearTeam

Mar 2021 - Dec 2022
North Urban Center, Tunis, Tunisia

- Gained proficiency in Scrum Project Management methodology, contributing to Agile Team Workflows.
- Completed comprehensive training in Linux environment management and Shell Scripting.
- Got hands-on practice in Cloud computing and DevOps tools.
- Learned and practiced Git and Github.
- Developed a CRUD API using FastAPI and PostgreSQL for the DataBase.

## PROJECTS

### Multi-Document Agent for Question Answering using RAG
Business & AI

July 2024 - September 2024
Megrine Business Center, Tunis, Tunisia

- Executed Semantic Chunking on multiple PDF documents.
- Developed data indexing with ChromaDB as Vector DataBase for efficient Semantic Search.
- Customized an advanced Retriever to improve accuracy in Data Extraction.
- Created a multi-document ReAct Agent utilizing Retrieval Augmented Generation for multi-step question answering.

Key Words : GenAI | LLM | Transformers | Agent | ReAct | RAG | Ollama | LlamaIndex | Langchain | BERT | LLM Prompting

### CRUD API for User management system
NearTeam

December 2023 - June 2024
North Urban Center, Tunis, Tunisia

- Created asynchronous CRUD endpoints.
- Handeled Exceptions, HTTP headers, JSON responses and requests.
- Managed Logs for an effective Debugging.
- Performed Unit testing and Integration tests.
- Containerized the application with Docker.
- Designed PostgeSQL powered DataBase.

Key Words : FastAPI | ORM | SQLAlchemy | PyTest | Uvicorn | Docker | Git | Github | YAML

### Personal Portfolio
Enstab

February 2024 - April 2021
Tunis, Tunisia

- Developed DataBase with PostgreSQL and deployed it on Railway.
- Developed the API using Django and deployed on Vercel.
- Developed the Front-End using Bootstrap.

Key Words : Django | Web Development | Back-End | PostgeSQL | Python | Railway | Vercel | CI/CD Integration

### Data Processing Pipeline for Production Machine Learning

January 2024 - February 2024

Tunis, Tunisia

Enstab

- Performed Feature Selection using Correlation matrix and univariate statistical tests.
- Streamlined Data Validation using schema inferred based on statistcs from the Dataset.
- Concieved Feature engineering component using TensorFlow Transform.
- Used SQLite database to store pipeline metadata.
- Implemented debgging using ML Metadata to get more control over the Data flow of the pipeline.
- Running the Pipeline using Apache Beam.

Key Words : MLOps | Apache Beam | TFX | TFDV | EDA | TFT | Scikit Learn | ML MetaData

### Customer Product Reviews Classifier on AWS

June 2023 - Aout 2023

Tunis, Tunisia

Coursera

- Utilized AWS Glue and Amazon Athena to ingest and transform customer product review data.
- Conducted data analysis using AWS Data Wrangler to visualize key insights from the reviews.
- Performed a Statistical bias detection on the dataset, generating reports to guide feature engineering and mitigate societal biases.
- Leveraged Amazon Sagemaker Autopilot to train a BERT-based NLP model for sentiment classification.
- Deployed the model on REST Endpoint.

Key Words : AutoML | AWS | AWS Sagemaker | EDA | NLTK | Pandas | Amazon S3 | Data Lake

### Movie Recommender System

January 2023 - Mai 2023

Tunis, Tunisia

Enstab

- Developed the model with two algorithms : Collaborative filtering and Content based filtering.
- Trained the The model on dataset with over 1 million item.
- Serve the Model using TensorFlow Serving and Docker.
- Deployed the model on Flask Powered App.

Key Words : MLOps | Flask | Web Server | API | EDA | Deep Learning | Neural Networks | Linear Algebra | Regression

## SKILLS

- **Data Analysis :** Time Series Forecasting, Geospatial Data Analysis, Exploratory Data Analysis.
- Generative AI : Prompt Engineering, Conversational AI.
- Data Engineering : ETL, Web Scraping, Web Automation, OLTP, REST APIs, RDBMS, NoSQL.
- Computer Science : OOP, Software testing, DevOps, Cloud Computing, Asynchronous programming.
- Machine Learning : Supervised learning, Semi-Supervised Learning, Unsupervised learning, Transfer Leraning.
- Statistics : Inferential statistics, stochastic processes, A/B testing, Marcov Chains.
- Programming Langages : Python, Javascript, HTML, SQL, YAML.
- Cloud Services : AWS, Vercel, Railway, Atlas, GCP.
- Frameworks and Libraries : TensorFlow, Keras, Pytorch, Pandas, Numpy, SKlearn, Matplotlib, Seaborn, Django, FastAPI, Selenium, LangChain, OpenAI, Express.js, SQLite, BigQuery, CrewAI, LlamaIndex, Pydantic.
- Modern Languages : Arab, French, English.

## EDUCATION

### Bachelor of Engineering in Advanced Technologies - BAC + 5

Sep 2021 - June 2025

Borj Cedria, Tunisia

National School of Sciences and Advanced technologies - ENSTAB

### Prepratory Studies for Engineering in Physics and Technology - BAC + 2

September 2018 - July 2021

El Manar, Tunis, Tunisia

Preparatory Institute for Engineering Studies of El Manar - IPEIEM