

# BOGHOS HAMALIAN

+961 76/591-755 • boghoshamalian@gmail.com • [linkedin: boghos hamalian](#) • [github.com/Boghosh](#)

## PROJECTS

### RAG Chatbot ([Github](#))

Nov 2025- In Progress

- Developed a Retrieval-Augmented Generation (**RAG**) system that answers user questions based on uploaded PDFs using **Google Gemini** and **LangChain**.
- Implemented document loading, chunking, embedding generation (**Hugging Face**), and contextual retrieval with **Chroma** vector database.
- Built a **FastAPI** backend with a POST API to handle user queries, enabling integration of AI models into applications. Currently containerizing the system with **Docker** and preparing **AWS** deployment, demonstrating cloud deployment and model integration skills.

### Weather Probability Prediction App — NASA Space Apps Challenge 2025 ([Github](#))

Oct 2025

- Contributed to building a Streamlit web application that predicts weather event probabilities using Bayesian networks and NASA's MERRA-2 climate dataset.
- Implemented backend logic in **Python** for probabilistic computations and **SQLite** data handling.
- Collaborated with a 4-member team on integration of the **Google Gemini API** for AI-based output summarization, using Git/GitHub for version control.

### Predictive Stock Trading Algorithm

- Developed a Python trading algorithm using **Yahoo Finance's** real-time data. Utilized **Pandas** for data cleaning, implemented supervised machine learning models with **Scikit-learn**, and **Matplotlib** for visualization to predict market movements and generate buy/sell signals for long-term investment strategies.

Sep 2023 - Dec 2023

## WORK EXPERIENCE

### Xpertbot

Backend Development Internship

Beirut, Lebanon  
Oct 2024 - Feb 2025

- Gained hands-on experience in **Laravel**, **PHP**, and **RESTful APIs** development.
- Managed version control with **Git**, **GitHub**, and handled dependencies using **Composer**.
- Utilized **Postman** for API testing, and **JSON** for data exchange.

### Jack Gifts Accessories

Shopify Website Manager

Beirut, Lebanon  
May 2024 - Dec 2024

- Managed and maintained the Jack Gifts Accessories **Shopify** website, ensuring updates and smooth functionality.
- Utilized **Google Analytics** and **Meta Pixel** to improve website performance and boost social media engagement through data insights.
- Conducted **data entry** and analysis using **Excel** to maintain accurate records. Provided **technical support** for Shopify apps and resolved minor issues to improve the store's overall operations.

## EDUCATION

### Haigazian University

Bachelor of Science: Computer Science

Beirut, Lebanon  
**Graduated:** May 2025

### Melankton and Haig Arslanian Djemaran

French Baccalaureate

Beirut, Lebanon  
**Graduated:** July 2021

## TECHNICAL SKILLS

- Programming:** Python, JavaScript, TypeScript, Java, SQL, HTML5, CSS.
- Frameworks/Libraries:** LangChain, Scikit-learn, FastAPI, Pandas, NumPy, SciPy, Matplotlib, Bayesian Networks, React JS, React Native, Expo.
- Tools:** GitHub, Git, MySQL, SQLite, MongoDB, Chromadb, Google Gemini API, Hugging Face, Appwrite, Trello, Postman, Excel.
- Soft Skills:** Time Management, Teamwork, Agile workflow, Problem-solving, Documentation.

## LANGUAGES

- English, French, Arabic, Armenian