IBRAHIM EL KHANSA

+961 3 299 973 ◇ Beirut, Lebanon ◇ ibrahimelkhansa02@gmail.com
ibrahimelkhansa.com ◇ linkedin.com/in/ibrahimelkhansa ◇ github.com/Ibrahim-ElKhansa

Skills

Languages:	English (Fluent), Arabic (Native)
Core Programming Skills:	JavaScript, TypeScript, HTML, CSS, Python
Frontend/Backend:	React, Next.js, Node.js, SCSS, Flask
Infrastructures:	Docker, Supabase, Firebase, MongoDB

Education

American University of Beirut (AUB) — Beirut, Lebanon
BE in Computer Science Engineering & Minor in Economics — Sep 2020 - May 2025

Work Experience

American University of Beirut — Beirut, Lebanon
Part Time Research Assistant — June 2025 - August 2025

- Conducted computational musicology research focusing on Arabic music theory, collaborating with faculty and researchers to analyze and visualize complex musical concepts including tuning systems, maqamat, ajnas, and their transpositions and modulations
- Led full-stack development using React, Next.js, and TypeScript to create interactive educational tools and real-time audio synthesis for maqām systems within the Music Intelligence Lab framework

Murex — Beirut, Lebanon
Java Software Development Intern — June 2024 - August 2024

- Enhanced MX3 platform's Business Process Management module by developing UI components using Java Swing, enabling financial users to add editable descriptions and task comments, which reduced workflow errors and improved operational clarity for major financial institutions worldwide
- Refactored backend systems to support new BPM features, modifying existing database integrations and ensuring seamless compatibility between old and new code
- Built robust integration tests and maintained CI/CD pipelines using Jenkins, Maven, and Git, leveraging Murex's proprietary QA frameworks (GQAF, DJOBs, TPKs) to prevent regressions and ensure software stability across environments
- Delivered scalable solutions through Agile development practices, collaborating with QA engineers, product managers, and architects in daily stand-ups and retrospectives to align technical implementation with user requirements

Fits Consulting — Beirut, Lebanon
Digital Transformation Consultant Intern — August 2022 - November 2022

- Analyzed client business processes and developed automated workflow solutions using Bizagi and Java, creating admin portals and process models that streamlined operations for multiple client organizations
- Participated in client meetings and requirements gathering sessions to translate business needs into technical specifications for digital transformation initiatives
- Created comprehensive process documentation and flow charts that served as implementation guides for clients transitioning from manual to automated systems

Projects

Coursis - A platform that helps students efficiently generate optimal university schedules based on dynamic algorithms, custom data structures, and user preferences, now serving over 15,000 users. Built entirely using Next.js, React, Firebase, advanced algorithms, and advanced data structures.

MusicLeb - A virtual hub for the Lebanese music scene that connects musicians, artists, and fans with a focus on performance optimization and community building, now with over 150 registered artists. Developed the full-stack application using Next.js (CSR, SSR, SSG, ISR), React, TypeScript, and Firebase.

Maqam Network - An educational platform for exploring Arabic music theory, featuring maqamat, ajnas, seyr, tuning systems, and interactive visualizations with dynamic audio playback. Built with Next.js, React, TypeScript, audio synthesis libraries, and advanced algorithms.

My Unfollowers - A website that provides insight into Instagram followers and following lists, showing who follows you back and who doesn't through comprehensive analytics, garnering 1200+ visitors in the first week. Built with Next.js, React, TypeScript, SCSS, file processing, and data visualization.

H.A.D.I - A machine learning-powered platform that predicts diseases based on user-reported symptoms and integrates OpenAI's GPT API for medication data. Developed using Python (Flask), TensorFlow, Jupyter Notebook, Docker, React, Next.js, and TypeScript.