KHALID ALANSARY

New Cairo, Egypt

EDUCATION

Ain Shams University

GPA: 2.99/4.0

Bachelor of Science in Computer and Systems Engineering

Sep. 2021 - June 2026

• Relevant Coursework: Data Structures, Algorithms, Database Systems, Software Engineering, Computer Networks

- Academic Projects:
 - * Online Marketplace | TypeScript, React, Supabase, PostgreSQL, Tailwind CSS
 - · A full-stack marketplace app with user authentication, product listings, and transactions between users.
 - * Tiny Language Parser $\mid C, C++, Qt, Graphviz$
 - · Developed a compiler frontend with a GUI that generates a parse tree for the Tiny programming language.
 - * Multipurpose XML Utility | C++ (with boost library), Qt, Graphviz
 - · A desktop application that validates and formats the XML, converts it to JSON, fixes misplaced tags, visualizes the XML data, along with various other features.
 - · Applied suitable data structures and algorithms for representing and manipulating the XML internally.

EXPERIENCE

Ezz Steel July 2024

Industrial Automation and IT Summer Internship

Ain Sokhna, Suez

- Created Python scripts that normalize CSV files to facilitate importation into the Oracle database.
- Acquired proficiency in server and network management, and security protocols, by implementing user-specific privileges on the company network.

CERTIFICATIONS

GitHub Foundations certification | Git, GitHub

March 2025

Validated proficiency in Git version control, collaborative workflows, and GitHub platform features.

Courses & Projects

Scrimba's TypeScript course | TypeScript

March 2025

 Learned TypeScript's static typing system to build scalable applications with improved code quality, error detection, and developer productivity.

Scrimba's Advanced React course | React, Javascript, HTML, CSS

March 2025

- Implemented reusability patterns and custom hooks for state management in an e-commerce application.
- Built client-side routing with protected routes and integrated Firebase for authentication and database operations.
- Applied performance optimization techniques including memoization and lazy loading for complex applications.

HarvardX: CS50's Introduction to Databases with SQL | SQL, SQLite, MySQL, PostgreSQL Feb. 202

- Learned how to create, read, update, and delete data using SQL commands. Gained practical experience with various database management systems, such as SQLite, MySQL, and PostgreSQL.
- <u>Final Project:</u> Developed a database application to manage a library system, including features for book checkouts, returns, and user management. Utilized advanced SQL queries and optimized database performance.

HarvardX: Computer Science for Artificial Intelligence | Python, TensorFlow, Algorithms Aug. 20

• Gained exposure to the theory behind graph search algorithms, classification, optimization, reinforcement learning, and other topics in artificial intelligence and machine learning

HarvardX: Computer Science for Python Programming | Python

Oct. 2022

• Developed foundational programming skills in Python, including data structures, algorithms, and object-oriented programming.

TECHNICAL SKILLS

Languages: JavaScript, TypeScript, HTML/CSS, Python, Java, SQL, C/C++, Bash/Shell scripting

Frameworks: React, Node.js, Flask, Django, Qt

Developer Tools: Git, Docker, Linux, Vim, CMake, VS Code **Libraries**: Boost, tkinter, pytest, pandas, NumPy, Matplotlib