KEVIN HANY BASTAWROUS

Cairo, Egypt

Work Experience

Commercial International Bank (CIB)

July 2025 - Aug 2025

Summer Intern

Cairo, Egypt (Remote)

- Researched and presented strategies on **AI-driven cybersecurity**, sustainable finance, and risk management, strengthening knowledge of secure system integration.
- Collaborated with professionals in **AI/ML and security domains**, gaining exposure to practical applications of AI ethics and digital transformation initiatives.

Education

Ain Shams University

Expected June 2027

Bachelor of Computer Science

Cairo, Egypt

- CGPA: 3.85/4.0
- Relevant Coursework: Algorithms and Data Structures, Operating Systems, Artificial Intelligence, Computer Architecture, Software Engineering

Technical Skills

Languages: Python, C++, Go, SQL, JavaScript

Developer Tools: Git, Docker, Postman, GitHub Actions, Jupyter Notebook **Libraries/Frameworks**: Node.js, PostgreSQL, MongoDB, TensorFlow, Scikit-learn

Projects

Camaroo (Custom Language) | C++, CMake, Compilers

2024 - Ongoing

- Developed a Lexer, Parser, and AST to support modular interpretation of a custom programming language.
- Improved parsing reliability with structured error handling techniques inspired by compiler theory.

AutoComplete Text Editor | C++, Qt, Data Structures

2025

- Built an interactive editor with **real-time text prediction** using a Trie data structure, reducing lookup latency from O(n) to O(k).
- Added frequency-based suggestions and user-defined vocabularies for adaptive predictions.

URL Shortener Service | Go, MySQL, REST APIs

2024

- Implemented a scalable service supporting 10k+ URL mappings with persistent storage in MySQL.
- Applied MD5 hashing for unique, collision-resistant identifiers and optimized API endpoints for concurrency.

Extracurricular Activities

Open Source Community (OSC)

May 2025 - Present

Backend Developer

Cairo, Egypt

- Developed and maintained **production-grade backend APIs** using Node.js and PostgreSQL.
- Applied REST design patterns, scalability principles, and CI/CD in team-based projects.

ACM ICPC Community

Aug 2023 - Aug 2025

Member

Cairo, Egypt

- Solved 700+ problems on algorithms, graph theory, and dynamic programming, strengthening competitive programming skills.
- Applied time complexity analysis and memory optimization in algorithmic problem solving.