Ahmed M. Ghoneim

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OBJECTIVE

Full-time entry-level position in software Engineering.

EDUCATION

Bachelor of Science in Computer Engineering, University of South Florida, Tampa, Florida Expected May 2024
Major GPA: 3.6 / 4.0; **USF CGPA:** 3.2 / 4.0

Key specialized courses: Database Structure, CMOS-VLSI Design, Computer Architecture, Software Engineering, Artificial Intelligence

SKILLS

Operating Systems:	Android, iOS, Linux, Ubuntu, Windows
Programming:	C, C++, Javascript, Python, Verilog, VHDL
Databases:	SQL, MySQL, Firestore, Microsoft SQL
Frameworks/Platforms:	Azure, Devops, Firebase, React Native, Node.js, Cadence Virtuoso, MobaXterm, VSC
Version Control:	Git & Github

RELEVANT EXPERIENCE

Software Engineering Intern, NANLTECH LLC, Tampa, FL

Project 1: Emergency Notifying and Navigating App April 2023 to November 2023

- Worked on a safety app, improving user experience through design mockups and testing.
- Collaborated with a team to handle user sign-ups and data storage securely and efficiently using cloud services.
- Continuously used Android Studio and SwiftUI for app emulation, testing, and debugging.
- Used industry-standard tools for app development, focusing on performance and user-friendly interfaces.

Project 2: CRM system for Renova Construction December 2023 to present

- Developing a customer management system, setting up the core infrastructure on a cloud platform to ensure reliability and scalability.
- Automated updates for the system, ensuring it remains current without manual intervention.

KEY PROJECTS

Huffman Code Generator, USF May 2023 to October 2023

- Developed a Huffman Code Generator to efficiently compress text strings by encoding characters with variable-length codes based on their frequency, ensuring lossless data compression.
- Implemented a serialization method for the Huffman tree, enabling the compressed data to be accurately decompressed by reconstructing the tree from its serialized form.
- Designed and executed algorithms for tree construction, traversal, and character encoding/decoding, utilizing data structures like priority queues and binary trees for optimal performance.

Undirected weighted Graph ADT and Dijkstra's Algorithm, USF January 2022 to May 2022

- Developed a solution for finding the shortest paths in networks, useful in applications like GPS navigation and network optimization.
- Improved the efficiency of the solution, making it faster and requiring less computer memory.
- Applied the algorithm in practical scenarios such as digital mapping, telecommunications, and social media networking to solve single-source shortest path problems.

AFFILIATIONS

- Trinity Hospital Volunteer(Trinity, FL)
- Member of the IEEE January 2022 to present

HONORS AND AWARDS

- Honorable Volunteer in Trinity Hospital for 100+ hours of Volunteering April 2020
- Trinity Hospital Volunteer Scholarship February 2020