Hamdan Alkhoori

Hkhouri2000@gmail.com | (582)-203-9583 | LinkedIn

PORTFOLIO

Education

The Pennsylvania State University—University Park, PA — Anticipated graduation**:** Dec 2023
College of Engineering-B.S. in Computer Science — Cumulative GPA: 3.75/4.00
Eberly College of Science-B.S. in Mathematics, System Analysis

- Relevant Coursework: Data Structure & Algorithms, Computer Organization and Design, Systems Programming, AI, Computer Vision, Quantum Computation, Database Management Systems, Programming Languages Concepts, Operating Systems, Object Oriented Programming, Discrete Mathematics, Numerical Analysis, Linear Programs, Linear Algebra, Theory of Games, Real Analysis, Blockchain, Probability Theory, Mathematical Statistics

Projects

Penn State Advanced Vehicle Team and AutoDrive Challenge II — Penn State | Fall 2023
- Designed, developed, tested, and deployed autonomous vehicle tech on a real vehicle, competing against other universities

Blockchain Server-Client Node Implementation — Penn State | Spring 2023
- Implemented a simplified version of a blockchain as a list, with a focus on hashing functions and chain validation
- Created an interactive web interface with endpoints such as mining new blocks, adding transactions, and validating the chain

Book Review Website — Penn State | Spring 2023
- Developed a book review website using Flask and SQLAlchemy
- Implemented a PostgreSQL database to store user information, book details, and user reviews

Personal Website and Terminal-Like Profile — Dec 2022 - Current
- Created an about me website using HTML, CSS, and JavaScript
- Provided an interactive terminal-like portal which outputs information about myself based on the user's command line input

Real Estate Database Application — Penn State | Fall 2022
- Designed and developed an application to post a list of houses online
- Implemented a http interface to the database using php

Chat Application — Penn State | Summer 2022
- Implemented a chat application with client and server components and an interactive GUI

Field-Programming Gate Array (FPGA) MIPS Five Stage Pipelined CPU — Penn State | Fall 2021
- Utilized Xilinx Vivado software to implement a mini-CPU written in Verilog on a xc7z010clg400-1 device
- Mitigated data hazards and increased performance by implementing instruction forwarding

Room Scheduler — Penn State | Summer 2021
- Wrote a Java application to facilitate room reservations
- Features: adding a new room, cancelling a reservation, adding a new date, checking status, dropping a room, interactive GUI

Experiences

Policy Administration-UAE Embassy — Costa Rica | July 2023 – August 2023
- Gained knowledge and insights on the politics and economics of Costa Rica and South America
- Consolidated skills in writing analytical reports, briefs and research
- Acquired proficiency in delivering speeches and presentations at various events and occasions

Tadbeer Agency-A Private Recruitment Agency Licenses for Domestic Workers — Al Ain | May 2022 - Current
- Worked directly with vendors to cut infrastructure costs by 40% while keeping specifications high
- Installed desktop computers, server, networks, safety systems and Q-Matic system
- Implemented a channel for service provision such as a website, call center and a recruitment platform

Customer Service Executive-Alain City Municipality — Al Ain | June 2017 – July 2017
- Processed 6,000 transactions related to permits, leases, licenses, projects, plots, contracts, certifications
- Contributed to increasing customer satisfaction at 93%
- Collaborated with other departments to resolve customer issues and insure timely resolution

Presentations

Wildlife Conservation Using Drones to Track Wildlife Incidents — Penn State | Fall 2022

Skills

- Java, Python, C#, C, HTML, CSS, JavaScript, TypeScript, Verilog, KQL, SQ
- React, OpenCV, Kali Linux, Honeycomb, OpenTelemetry, SQLMap, Hashcat
- Docker, VirtualBox, Android Studio, Firebase Realtime Database, Parse Server, GitHub, Burp, Vivado, Power BI
- Fluent in Arabic, English