ASHKAN ARABI

(915) 888 - 9801 • aarabimian@miners.utep.edu • linkedin.com/in/ashkan-arabi • github.com/AshkanArabim

EDUCATION

Bachelor of Science in Computer Science, Mathematics Minor

University of Texas at El Paso, El Paso, TX

Graduating 05/26

Major GPA: 4.00

GPA: 3.95

Relevant coursework: Object-Oriented Programming, Data Structures and Algorithms, Operating Systems, Matrix Algebra

SKILLS

Languages: Python(advanced), Java(advanced), Vala(mid), HTML/CSS(mid), JavaScript(mid), UML(mid), Bash shell scripting(mid), Haskell(mid), LaTeX(novice), C++(novice), SQL(novice)

Tools: Linux(advanced), Git(advanced), GTK(mid), PyTorch(mid), TensorFlow(mid), NumPy(mid), Pandas(mid), Docker(novice)

EXPERIENCE

Information Technology Intern: Texas Instruments, Dallas, TX

May 2024 - present

- Set up infrastructure for fab transporter robots by configuring Docker containers on Linux servers.
- Ensured system reliability through unit and integration testing with Insomnia.
- Coordinated with 10+ sysadmins & stakeholders to configure Oracle SQL databases and internal APIs.

Open-Source Contributor: GNOME Foundation, Remote

December 2023 - June 2024

- Collaborated with software engineers in development of GNOME Clocks; used by thousands of Linux users to track time.
- Added features such as full-screen timers and timer editing (link to video demo ...).
- Fixed timers not progressing during system suspend by revising timer logic.
- Added functionality to world clock to show country and state when two cities have the same name.

Undergraduate Research Assistant: UTEP, El Paso, TX

January 2024 - May 2024

- · Contributed to creation of Autistic vs neurotypical speech classifier by using generative AI to synthesize training data.
- Developed an **accent-changer model** able to convert foreign English accents to native using **HuggingFace** pretrained models through their **Python** API.
- Implemented a neural style-transfer model in PyTorch to learn PyTorch & explore usage for accent-changing.
- Reduced evaluation script runtime from 24+ hours to 10 minutes by rewriting loops as higher-dimension tensor operations.

Undergraduate Research Intern: Temple University, Philadelphia, PA

June - July 2023

- Wrote **first-author publication** 🗹 presented at ACM MobiHoc about using Wi-Fi CSI for hand gesture recognition on phones.
- Developed CNN architecture to classify 5 gestures from 4 people in 6 scenarios using **Keras**.
- Obtained >90% classification accuracy by using techniques such as LR Scheduling.
- 1st place for the best REU site final presentation.

PROJECTS

PWAANG - a board game written in Haskell 2

May 2024

• Implemented a board game in **Haskell** (functional programming language) using monads, pattern matching, and recursion.

Bombshell - Unix shell written in Python 2

April 2024

• Added features like pipes, redirection, and background tasks by using multi-threading and semaphores, ensuring concurrency.

CLI Car Dealership 🗹

April 2024

- Wrote an Object-Oriented car dealership software in Java following MVC architecture & OOP design patterns.
- Used Git & GitHub features such as pull requests, merges and branches to work in team of 3.

Linux Timer 2

January 2024

- Developed a Linux timer application using GTK & Vala, using an event-driven architecture.
- Implemented functionalities for starting, pausing, resetting, and editing timers, using different GTK4 widgets & signals.

Advent of Code 2022 - Annual Programming Challenge 🗹

August 2023

- Coded C++ solutions to 12 of 25 challenge questions using backtracking, graph traversal algorithms, and more.
- Used classes, queues, vectors, and streams to efficiently calculate results based on given inputs.

LEADERSHIP

President & Founder - Free and Open Source Software Club at UTEP T

December 2023 - Present

- · Recruited team of 6 officers to host weekly workshops on git, Linux, Vim, open-source software development, and more.
- Hosted UTEP's first open-source hackathon, OpenHack, attended by more than 12 first-time contributors.

Treasurer - Association for Computing Machinery at UTEP

August 2022 - January 2024

• Held the Sun City Hackathon; a three-day competition attended by more than 20 students to develop Al-powered apps.