

YUSUF KHAN

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EDUCATION

University of Houston, College of Natural Science and Mathematics

Bachelor of Science in Computer Science | Minor in Management Information Systems | **3.8 GPA**

May 2025

Awards: Honors Dean's List Distinction | Honors College Outstanding First-Year Student

Relevant Coursework: **Programming & Data Structures, Computer Organization & Architecture, Database Systems, Operating Systems, Discrete Mathematics, Linear Algebra, Statistics for the Sciences**

SKILLS

- Python, C++, SQL, Excel, MS Office, JavaScript/HTML/CSS, React, Flask, BootStrap, Git, Linux, Postman, APIs

EXPERIENCE

SEP Data Structures Workshop Co-Facilitator

December 2023 - Present

- Guide 30+ students in interactive workshops, reinforcing Data Structures concepts in C++ and offering tailored support to resolve learning obstacles.
- Develop supplementary materials to enhance comprehension, resulting in a 10% increase in exam averages compared to the class average.
- Foster a collaborative and supportive environment, cultivating critical thinking and problem-solving skills among workshop participants.

NASA L'SPACE NPWEE Academy

January 2024 - Present

- Collaborating in NASA L'SPACE team-based proposal development emphasizing NASA standards, focusing on Taxonomy 11.

PROJECTS

Rate Monotonic Scheduling Algorithm | C++, Git

- Developed a scheduling algorithm in C++ using threads and sockets for multithreading and synchronization.
- Implemented priority queues to manage tasks based on their priorities, facilitating efficient scheduling decisions.
- Achieved synchronization between main and child threads, ensuring accurate and consistent task set utilization, hyperperiod, and rate monotonic scheduling diagrams.

[DropAwf](#) | Azure, React.js, HTML, CSS, MySQL, Git

- Designed and developed a postal system using Azure-hosted MySQL, managing employees, parcels, and customers.
- Implemented SQL queries and triggers to enhance parcel tracking and address customer complaints within the system.
- Collaborated with team members using Git for version control and seamless integration for timely project completion.
- Developed a full-stack application, leveraging React.js for the frontend and JavaScript for the backend implementation.

DEItectives | React.js, Python, Flask, Git

- Developed a web app addressing the impact of Texas SB-17 on DEI programs, bridging the gap for affected students.
- Led development of the project's backend using Flask to build a RESTful API that interacts with the given dataset.
- Won the DevRev-sponsored challenge for the most impactful project at UT HackTX, surpassing 60+ competing projects.

AWARDS

Eagle Scout - Awarded by Boy Scouts of America

August 2012 - Present

- Led planning and construction of a commercial playground for an inner-city place of worship, benefiting 100+ children.
- Managed a team of 40+ volunteers and completed a project with 150+ hours of planning, oversight, and building.

Congressional Award (Gold) - Awarded by United States Congress

March 2018 - November 2021

- Earned the prestigious Congressional Gold Award, the United States Congress's highest honor for young Americans.
- Demonstrated commitment to community service and personal development by completing 400 hours of voluntary service, 200 hours of personal development, and 200 hours of personal fitness.

LEADERSHIP & INVOLVEMENT

HEP - Honors Engineering Program - Founder

March 2022 - Present

- Selected by faculty based on exemplary academic performance and proven leadership in peer-led STEM initiatives, to spearhead an empowerment program benefiting over 130 honors engineering students.