Akash Nelson

<u>akashnelson.dev</u> | akashnelson00@gmail.com | linkedin.com/in/akash-nelson | github.com/Akashew

EDUCATION

University of Houston

Houston, TX

B.S. in Computer Science, Minor in Mathematics

Aug. 2021 - May 2025

Relevant Coursework:

Algorithms and Data Structures, Computer Organization and Architecture, Operating Systems, Discrete Math

EXPERIENCE

NASA - L'SPACE Mission Concept Academy

Program Analyst

Sept. 2023 - Dec. 2023

- Worked with 13 students in designing a cost-effective probe for Enceladus, targeting potential life
- Tracked progress with Project Manager, Resource Manager, Lead Systems Engineer, and Chief Scientist
- Formulated the mission schedule to synchronize with project milestones and objectives
- Determined budget allocation for mission aspects of personnel, travel, facilities and subcontractors

Projects

Portfolio Website | JavaScript, HTML, CSS

January 2024

- Created a responsive website layout ensuring seamless user experiences across various devices and screen sizes
- Integrated jQuery API to improve user interaction and functionality

Cult of the Crow | C#, Unity, Blender

Aug. 2023 - Dec. 2023

- Collaborated with a team of 8 developers to create a 3D psychological horror game
- Constructed puzzle-solving mechanic that requires players to manipulate the environment to progress
- Designed 3D assets using Blender for immersive cutscenes and in-game models
- \bullet Enhanced game play through user-tested feedback, boosting player engagement by 25%
- Achieved 50+ downloads within the first month of release

Escape | Lua, $L\ddot{O}VE$, Tiled

June 2023

- \bullet Developed a 2D RPG based game where the player has to fight enemies in a cave using items found
- Devised core game functions for a 2D game using the Lua game engine LOVE and level editor Tiled
- Implemented sprite sheet-based character designs and animations for the game
- Applied Object-Oriented Programming for the functions of the assets

Multi-threaded Code Decompressor | C++, POSIX Threads, Mutex, WSL

April 2023

Houston, TX

- Implemented multi-threaded Huffman decoder using POSIX threads to efficiently decode encoded data
- Utilized mutex and conditional variables to prevent race conditions and deadlocks

Extracurricular

CougarAI DataCON

April 2023 - Sept. 2023

• Facilitated with potential venues, including phone calls to secure an appropriate location for the event

• Contacted restaurants to inquire about catering, negotiate pricing, and coordinate food services

IEEE-NSM

Jan.

Jan. 2023 - Aug. 2023

Tutoring Chair

Logistics

Houston, TX

- \bullet Managed the organization's tutor/mentor sector of 60+ members
- Assisted in developing the workshops by conducting research and promoting the workshops

CougarCS

Aug. 2022 - Aug. 2023

Tutor Houston, TX

- Instructed 100+ students over the fundamentals of C++, Python, OOP and Data Structure
- Provided one-on-one and group tutoring sessions to help students improve their problem-solving skills

TECHNICAL SKILLS

Languages: C++, C#, Python, C, Java, JavaScript, HTML, CSS, Lua

Developer Tools: Git, Unity, Blender, Siemens NX, LÖVE, Tiled, Linux, Visual Studio, VS Code, Eclipse