Mira Khan

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EDUCATION

University of Virginia, Bachelor of Science in Computer Science

Charlottesville, VA

GPA: 3.806

JUNE 2022 - MAY 2026

Relevant Coursework: Multivariable Calculus, Data Structures and Algorithms 1, Discrete Mathematics and Theory 1 Current Courses: Computer Systems and Organization 1, Data Structures and Algorithms 2, Software Development Essentials, Independent Computer Science Research

SKILLS

Programming Languages: Java · C# · Python · Familiar with HTML, CSS, React Native

Technical: Unity Game Engine · Linux/Ubuntu · ROS · Vicon · Agile FDD · Git · Familiar with Machine Learning

EXPERIENCE

LESS Lab Undergraduate Research Assistant, University of Virginia

MAR 2023 - PRESENT

- Simulating realistic environments and navigation algorithms to improve drone trajectories in Unity (C#)
- Testing mixed-reality effectiveness by feeding drone video data from simulation for obstacle avoidance in reality
- Implementing an advanced neural network system enabling automated navigation through intricate virtual forests
- README

Undergraduate Teaching Assistant, University of Virginia

• CS 1112: Introduction to Programming

• APMA 1090: Single Variable Calculus I

• ENGR 1624: Intro to Engineering

AUG 2023 - DEC 2023

JUNE 2023 - AUG 2023

AUG 2022 - DEC 2022

Senior Capstone Project: Mocha's 8-Bit Adventure

MAY 2022

- Developed story-rich platformer RPG demo about a lost dog's adventure to return home in Unity (C#)
- Integrated immersive features such as detailed graphics and fighting systems
- <u>README</u> | <u>Playable Demo</u>

Senior Research Project: Habit Rabbit

SEPT 2021 - MAY 2022

- Targeted problem of motivation challenges by appealing through gamification of task management in Unity (C#)
- Incorporated extrinsic motivational factors and fun incentives including virtual pets and prizes
- README

ORGANIZATIONS

A. James Clark Scholars Program

- Selected as a scholar to a competitive program dedicated to uplifting underrepresented students in engineering who
 exhibit strong academic and leadership potential
- Completed intensive summer semester prior to college, gaining credits in applied math and engineering classes
- Participated in weekly leadership seminars held by trailblazers in the field
- Anticipated semester abroad in Spain at the Technical University of Valencia

Girls Who Code

- Partaking in a community dedicated to closing the gender gap in technology by uplifting women and non-binary individuals in computer science
- Engaging in workshops geared toward building skills in coding, problem-solving techniques, and professionalism
- Competing in hackathons throughout the year to build a strong foundation in teamwork and project management
- Providing mentorship to underclassmen and secondary students interested in the field of technology

Out in STEM

- Advocating for the empowerment of LGBTQ+ individuals in STEM to succeed in the professional world
- Cultivating a supporting environment nurturing ideas of innovation and leadership