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 · ROS · Vicon · Agile FDD · Git · Software Testing · *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**   AUG 2023 - DEC 2023
- **APMA 1090: Single Variable Calculus I**   JUNE 2023 - AUG 2023
- **ENGR 1624: Intro to Engineering**   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
- README | Playable Demo

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