Mohona Ghosh

mg62755@tamu.edu
https://www.linkedin.com/in/mohona-ghosh/ 469.678.6585

Education

BS in Computer Engineering (Honors) **Aug 2020 – May 2024**
Texas A&M University, College of Engineering; Dean's Honor Roll *College Station, TX*

- Minors: Mathematics, Cybersecurity
- Selected Coursework: Software Engineering, Electrical Signals and Systems, Linear Algebra, Computer Architecture and Design, Computer Systems, Electrical Circuit Theory, Differential Equations, Digital System Design, Data Structures and Algorithms, Principles of Statistics, Multivariable Calculus, Discrete Structures for Computing

Certificate **July 2021** *(Remote)*
AI4ALL - Discover AI and Apply AI

Experience

VEX U Robotics Programming Lead **July 2021 – Present**
Texas A&M University, Women in Engineering *College Station, TX*

- Qualified for the 2022 VEX U Robotics Worlds Championship (May 2022).
- Coordinating and mentoring a team of 15 members in the design and construction of two robots for the VEX U Regional and World championships.
- Delegating key programming components, reviewing and debugging over 1000 lines of source code, coding time-critical components, designing C++ curriculum for future competition seasons.

Undergraduate Researcher **Aug 2020 – Present**
Sketch Recognition Lab, PI: Dr. Tracy Hammond *College Station, TX*

- Analyzed 1.5 GB of usage data of the A&M bikeshare system to illustrate the effects of COVID-19 on campus life.
- Working with AI/ML models and Python packages to develop a robust rebalancing algorithm for the bikeshare system with intent to publish a journal paper.

Undergraduate Teaching Assistant **Aug 2021 – May 2022**
Texas A&M University, College of Engineering *College Station, TX*

- Helped debug student programs in C++ and Python during office hours. Courses: Data Structures and Algorithms, Introduction to Program Design, Engineering Computation in Python
- Graded weekly labs, created exam practice questions, and led reviews in class for over 100 students

Intern **July 2021 – Aug 2021**
Student Engineering Council Directed Internship *Remote*

- Collaborated with students across engineering disciplines to determine the optimal combination of materials and power grid layout to reduce the Texas energy grid's carbon footprint.
- Crafted and presented technical proposal, cost breakdown, and analysis of relevant legislation for commercial consideration.

Skills

Programming Language(s): Java, C++, Javascript, HTML/CSS, SQL, Python (Pandas, matplotlib, Seaborn, Sci-kit learn), R, Verilog, ARM Assembly
Operating System(s): Linux (Ubuntu, CentOS), Windows
Tools: JCreator, Spyder, Jupyter Notebook, VS Code, MobaXTerm, Github, LaTeX, Git, PROS, SOLIDWORKS, ArcGIS Pro, Microsoft Office, LTSpice, FPGA
Electronics Platforms: Arduino, Raspberry Pi 4B