Mohammed Hasanul Abedin Rafi

Electrical Engineer • Data Scientist • Software Engineer

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Education

SUNY, University At Buffalo *2021 (4 years)*
• Major : Computer Science and Engineering BS, • GPA : 3.3/4.0, Awarded $3000 for being an outstanding STEM Program student.
• Coursework : Data Structure · Algorithms · Python · Internet Technologies · Electric circuit analysis · Macro Economics · Research Physics · C++ Programming · Assembly languages · EE Physics Chemistry labs · Machine Learning · Operating Systems & Database systems · Statistical Analysis.

Experience

UB SEAS Undergraduate Researcher --- • Building Data Science projects with college student researchers. Creating framework for personal projects by using Python. Learning to build capstone projects by using metrics and data analysis.   *Aug2019-Present*

NASA MAA Robotics Instructor --- • Built small demo robots for rescue mission. • Helped 100+ High School and Middle School students to build their Arduino robot projects. Researching on global positioning system.• Built our own version of GPS tracking system. • Created robots that can take order. • Detect things and perform multiple tasks at the same time. • Helped with System analysis, Raspberry Pi, Arduino & hardware fixing.   *June-Aug2019*

Research Foundation of CUNY --- • Researched on robots in the field of Geology. • Understood the climate change with the High School students and finish the research on geological change in gulf of mexico. • Worked with the robotics team to build demo for Mars planetary robots.   *June-Aug2019*

Graphic Design and Game Design Intern --- • Assisted in designing programs for center performances • Collaborated with marketing director to create quarterly newsletter & wrote weekly updates for the center's website • Presented 10+ findings at the Center's annual professional developers conference • Created story for an RPG game and design the game in software. • Performed the game in an annual NYC Parks competition.   *June-Aug2017*

College Mechanical and IT Lab Assistant --- • Helped in building *website & creating content* • Created PowerPoint Presentations for seminars • Exhibits strong organizational skills through being a queensborough CC student. •Finished & Implemented fixes to 20+ hardware and software bugs by reconfiguring Windows/Mac Operating Systems over the weekend which resulted in saving the organization over 90+ hours of work.   *Jan-Aug2018*

College Discovery --- • Electrical engineering, math, science and liberal arts tutor. • Helped students do their work well through my experience. • Working as a team to do well and earn great grades. • Assisted in the test grading with other TA's.   *Jan-June 2018*

Hackathons/Projects

Undergraduate Software Engineering Projects: *Aug2019-Present*
• Developing prototypes of a mobile application to minimize the time required. • Preparing for the Vex-U Robotics challenge by building/design two new robots, code the robots for 3 prospective tournaments. Building autonomous vehicle for IGVC, creating systems by using AI and machine learning. Embedded question game for C++ class at Queensborough Community college.

Queensborough Community College   *May-2018*
• Helped building C++ projects. • *Understanding the technical knowledge to build the project.* • *Building the team work to create something amazing.*

NY massive evacuation hackthorne 2019 by MD5   *October-2018*
• Found the idea to build a drone system to create communication between wounded people in the destruction area and protective place. • Created the elevator pitch for the new designed drone with six different sensors. • The hardware design and software combination with Google Maps. • We used of Google Cloud Platform and 3rd most innovative pitch out of 40+ competing teams. • Best Real-Time Communication feature from 50+ participants ranging from students to tech professionals.

Skills

• **Proficient:** Java (2 year) · HTML/CSS (3 year) · Git (1.5 year) · Python (2 year) · C++ (2 year) · JavaScript (1.5 year) • Familiar: swift (<6 months) · MySQL(1year) · Bootstrap(1 year) · R(<6 months) · Visual Basic *& Matlab* (1 year) · Node Js (<6 months) · jQuery(1 year) · SAS(<6 months)
• **Soft Skills:** Project Management · Microsoft Office · Resilient work ethic and time management skills · Public Speaking · Debating · Leadership.
• **Linguistics:** English · Bangla · Arabic · Urdu · Hindi · Punjabi · Spanish
• **Design Skills:** Photography · Cinematography · Adobe Photoshop · Adobe Premiere ProX · Adobe illustrator · FinalCut Pro · After Effects · Lightroom · Procreate.

Activities

• Board of Director at UB Undergraduate Student Government Association, helping with the clubs funding and Social Media. • Former Senator at Queensborough CC Student Government. • Former Photographer and Editor at CSTEP• Soccer Captain of Cunningham Youth Soccer Team in Queens, NY. • Project Engineer at UB AIAA, UB HyperBull, UB IEEE and UB Robotics. Helped in Engineering, Designing and Coding to Build Intelligent Engineering projects. • Active member in UB Debate, UB Tennis, UB MSA, UB Hackathon and CSTEP.