Muhana Begum

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SKILLS

- Technical Tools: AutoCAD, SOLIDWORKS, Bootstrap, WordPress, MacOS, iOS, Windows
- Programming Languages: C++, C, Python, JavaScript, Ruby, PHP, Visual Basic 6.0, VBA, VHDL
- Other: MS Word, Excel, PowerPoint, HTML, CSS, Visual Studio

EXPERIENCE

Student Intern   July 2018 – August 2018
Nemetz (S/A) & Associates, Toronto

- Demonstrated a thorough technical proficiency with AutoCAD by simplifying electrical layout drafts and modelling mechanical components for company publications
- Completed and filed field reports, technical reports, and administrative tasks using MS Word & Excel to a high degree of professionalism, which were later published internally and externally
- Took charge in reorganization of company reports to improve record collection

Outreach Director – Robotics Team   Nov 2015 – June 2019
FIRST Robotics Canada – Riverdale Collegiate Institute, Toronto

- Applied exceptional leadership and interpersonal skills in order to confidently lead the team to win the Entrepreneurship Award at regional and provincial competitions in 2019
- Promoted the team to sponsors, leading to a total accumulation of over $20,000 in funding for the team
- Took initiative and headed all finance and administrative work, displaying strong written and verbal communication skills

Teaching Assistant   Sept 2015 – May 2019
Yonge Street Mission Computer Literacy Lab, Toronto

- Designed a beginner level LEGO robotics curriculum used for 2+ years
- Taught and assisted in classes about graphic design, LEGO robotics, and advanced computer skills to 50+ elementary & middle school students
- Demonstrated a large breadth of technical knowledge by maintaining, updating, and improving computer lab systems

PROJECTS

RC4 Cryptography Implementation – C++

- Demonstrated a foundational understanding of logical operations in C++ and base85 encoding in order to recreate the RC4 encryption scheme
- Implemented user input and output for encrypted messages using string and array manipulation
- Gained a basic understanding in cryptography, internet security and privacy

Spring Launch from a Catapult – Visual Basic

- Collected raw data on distance achieved by the launching of a spring on a catapult
- Effectively analyzed data to create a mathematical representation of experimental results
- Implemented and derived various mathematical equations to create a program using Visual Basic that achieves 98% accuracy in determining how far any given spring will launch
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CLUBS

- University of Waterloo Electrical & Computer Engineering Ambassador   Oct 2019

ACHIEVEMENTS

- Clifton Foundation Full Tuition Scholarship   July 2019
- Bilingual Certification (English & French) – Riverdale Collegiate Institute   June 2019

EDUCATION

Candidate for Bachelor of Applied Science – Honours Electrical Engineering (Co-op)
University of Waterloo   Sept 2019 – May 2024