

EDUCATION

Buffalo, NY	University at Buffalo, The State University of New York	Expected May 2021
<ul style="list-style-type: none">• Major: Bachelor of Science in Computer Science (in major GPA:3.227).• Relevant Coursework: Digital System, Data Structures, Computer Organization, Discrete Structures, Algorithm & Complexity, Theory of Computation, Full-stack Web Application, Artificial Intelligence, Software Engineering, Programming Languages, Computer System Administration.		

EXPERIENCE

Vice President	AIAA Student Chapter	May 2020 - Present
American Institute of Aeronautics and Astronautics (www.ubaiaa.org)		
<ul style="list-style-type: none">• Increase engagement by developing website for club, created a dashboard to help club members know events and meetings quickly. Devised and implemented google sheets as website database.• Attend AIAA conferences, preside over weekly club meetings and delegate work in absence of president.• Recruiting new students, managing volunteer opportunities, and organize events throughout semester.		
IT Student Assistant	University at Buffalo	Oct 2018 - Present
<ul style="list-style-type: none">• Maintenance and installation of desktop operating system and software images, refining existing ticketing systems, Improved creation by incorporating Lansweeper.• Monitor and troubleshoot hardware and software problems, install workstations based on user needs.		
Research Software Engineer	UB SMART COE	Jan 2020 - Present
<ul style="list-style-type: none">• Working on a team research project as an Engineering Intramural sponsored by UB Sustainable Manufacturing and Advanced Robotic Technologies (SMART) COE under Dr. Andrew Olewnik.• Developing software for an autonomous Snowblower consisting of integrated RC snow thrower system.• Utilize sensors: radar, thermal camera on Raspberry pi and documentation on Confluence.		

PROJECTS

Personal Website: www.tamaghan.com

AMSAR

- Developed solution proposal for yearly research challenges offered to universities by NASA, Tested final product at NASA's Neutral Buoyancy Laboratory at the Johnson Space Center in September 2020.
- Designed an autonomous surface vehicle capable of assisting astronauts in distress in a marine time environment, through location and delivery of crew survival aids.
- Achieved autonomous driving capabilities by implementing Ultrasonic sensors for collision avoidance, TensorFlow for object detection and software defined radios (SDR) for direction finding.
- Utilized: OpenCV, Software defined radios, Python, C++, Shell, TensorFlow, Raspberry pi.

Vision Assist

- Designed a user interface to help people struggling with blindness navigate through environment.
- Won UB hackathon 2019 among 80 teams, by making a prototype using raspberry pi and computer vision to process camera footage in real-time identifying objects in user's path.
- Utilized: OpenCV, Python, TensorFlow, Raspberry pi.

Facegram

- Developed an interactive social media website for a full-stack web app course.
- Users are able to live message one another, post social media, create accounts, follow and like posts.
- Utilized: HTML, CSS, JavaScript, AJAX, Docker, Django, Postgres, Python, Misaka.

SKILLS

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- **Software:** (*proficient*): C++, Python, HTML, CSS, Git, JavaScript (*familiar*): Java, MIPS, Verilog, Ocaml, Bash.