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TAMAGHAN MAURYA

www.github.com/tamaghan

www.tamaghan.com

EDUCATION

Buffalo, NY **SUNY, University at Buffalo** **Fall 2017 – Spring 2021**

- **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

EMPLOYMENT

Vice President **AIAA Student Chapter** **May 2020 - Present**

American Institute of Aeronautics and Astronautics (www.ubaiaa.org)

- Increased engagement by developing website for the club, implemented a dashboard to help club members to know events and meetings on go.
- Preside over weekly club meetings and delegate work in the absence of the president.
- Recruit upcoming freshmen, communicate SA participation, volunteer opportunities, and organize events.

IT Student Assistant **University at Buffalo** **Oct 2018 - Present**

- Refined existing ticketing systems, Improved creation, maintenance and installation of desktop operating system and software images by incorporating Lansweeper.
- Handle day to day troubleshooting, installation, and maintenance of desktop hardware and software.

Research Software Engineer **UB Inc.** **Jan 2020 - Present**

- 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.
- Developed software for an autonomous snowblower consisting of a fully integrated remote-controlled (RC) snow thrower system.
- Utilize sensors like radar, thermal camera on Raspberry pi in python and documentation on confluence.

SOFTWARE PROJECTS

Personal Website: *www.tamaghan.com*

AMSAR

- Worked on a team project for NASA Micro-G NEXT, accepted to test 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 using Ultrasonic sensors for collision avoidance, open source library: 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 their environment.
- Won UB Hacking 2019, 1st Place, 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.
- Incorporated Live like and comment buttons with Chat apps and rooms.
- Utilized: HTML, CSS, JavaScript, AJAX, Docker, Django, Python, Misaka.

SKILLS

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