

ABOUT

Hi, my name is Marc. I'm a senior engineering student at UB and will be graduating in May 2024, and am searching for entry-level roles in NYC. I have graduate level experience with CFD (ANSYS Fluent), as well as experience with programming languages like C++ and Python. I have also completed an internship at a professional design firm in NYC. At the culmination of the internship, I used Trane Trace and NYC/ASHRAE codes to compute cooling loads for tenant fit out projects, sized and spec'd equipment, and completed two mechanical floor plans for filing. I wish to apply my professional and academic knowledge and experiences in a meaningful way, and I am also registered for the F.E. exam in October 2023, and thus will have EIT status upon graduation. Thanks for viewing my resume.

EDUCATION

University at Buffalo (UB)

Bachelor of Science in Mechanical Engineering

University Honors College

Buffalo, NY

Expected Grad: **May 2024**

- GPA: 3.8/4.0

TECHNICAL SKILLS & COURSEWORK

- **Programming Languages:** MATLAB, Arduino/C++, Python
- **Softwares:** SolidWorks FEA, AutoCAD, [Autodesk Revit](#), Bluebeam, Trane Trace, BIM360, CFD, Ansys Fluent
- **Other Skills:** Machining, 3D Printing, Soldering, PCB Design, MS Office, Word, Excel, & Powerpoint
- **Affiliations & Certifications:** ASME, USGBC, ASHRAE, Engineering Intramurals, E.I.T. (upcoming)

WORK EXPERIENCE

[Mechanical Project Engineer Intern, HVAC Design](#)

AMA Consulting Engineers P.C.

New York, NY

June 2023 - August 2023

- Used Trane Trace software to calculate heating and cooling loads of various project spaces in the NYC area.
- Became familiar with NYC, NYS, NFPA, and ASHRAE building and energy codes and their role in mechanical (HVAC), electrical, and plumbing design.
- Participated in project/construction management and became familiar with documents such as submittals, cutsheets, RFI's, shop drawings and reports, and surveys, and punch lists. Utilized softwares like Bluebeam to read, analyze, and create construction documents and/or architectural drawings.
- Designed HVAC systems for projects of various value and scope under the guidance and training of a licensed professional engineer. Spec'd and sized various airside, waterside, and refrigerant equipment for different project and client needs.

[Project Management & Engineering Internship](#)

TYESA

Buffalo, NY

October 2021 – May 2022

- Utilized geometric dimensioning and tolerancing (GD&T) and design for assembly and manufacturing (DFA/DFM) principles to design and assemble a UAV and self driving UGV.
- Created circuit diagrams, logical diagrams, and soldered an I/O system with batteries, arduino, sensors, servos, and motor drivers. Designed and soldered an original PCB for the embedded system.
- Used oscilloscopes, multimeters, wire cutters, and E-Calc simulations to fix and troubleshoot electronics issues.

LEADERSHIP & CAMPUS EXPERIENCE

UB Department of Mechanical & Aerospace Engineering

Teaching Assistant: Thermodynamics

Buffalo, NY

September 2022 – Present

- Led office hours and recitation sessions where students could ask questions related to academic advisement, mental health, homework, and projects.
- Assisted graduate staff in creating and grading problems and projects testing various thermodynamics principles.

Teaching Assistant: Engineering Dynamics

February 2023 – May 2023

- Led office hours and recitation sessions where students could ask questions related to academic advisement, mental health, homework, and projects.
- Assisted graduate staff in creating and grading problems and projects testing various mechanics principles.

UB School of Engineering & Applied Sciences

SEAS Lead Peer Mentor

Buffalo, NY

May 2022 - Present

- Completed trainings on peer guidance, sexual harassment, and EDI (Equity, diversity and inclusion).
- Created and curated resources to aid freshman students with mental health, time management, and academics.