Aabia Hasan

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EDUCATION

University of Michigan - College of Engineering - *Ann Arbor, MI*   *August 2021 – May 2025*
B.S Biomedical Engineering & B.S Computer Science Engineering   *GPA: 3.58*

WORK EXPERIENCE

Stryker Corporation – Stryker AI Digital Robotics and Enabling Technology   **Menlo Park, CA**
AI Data Science Intern   *May – August 2024*
- Constructing both frontend and backend of an internal tool with AI models in multimodality to process medical images. Creating docker to allow use across all devices.
- Hands on experience utilizing vision and language foundation model. Designing small system to automate specific tasks, evaluate model performance, and then finetune the model
- Manage enterprise scale datasets, adopt Machine Learning Operations practice, streamlining the dataset for AI/ML development
- Training neural network classifier/deep learning model to determine orientation of Fluoro shot X-rays
- Learning about computer vision, data analysis, Stryker's emergence in software, and bringing products to market

Stryker Corporation – Core Spine and Extremities, Sustaining Team   **Leesburg, VA**
Product Engineering Intern   *May – August 2023*
- Cultivated project management and technical skills through the successful execution of change control processes, improving product lifecycle management and operational efficiency through cross functional collaboration with 8 core spine departments
- Managed change control processes for 9 Stryker products. Projects consisted of identifying issues in drawings, assessing the changes required, and implementing CAD drawing updates in SolidWorks to ensure all products are up to standard
- Spearheaded the development of a damage-resistant shipping prototype, from conceptual design to 3D printing and validation, ensuring full compliance with EU regulatory requirements while documenting all process stages for operational continuity.
- Developed and deployed an organizational tool that consolidated product details and project statuses, facilitating division-wide access via OneDrive and significantly enhancing cross-departmental communication and efficiency.
- Communicated with Stryker suppliers as Stryker's representative to discuss changes and implementation processes

Michigan Medicine - 3D & Innovations Lab   **Ann Arbor, MI**
Senior Biomedical Engineering Technician   *February 2022 - Present*
- Laparoscopic Surgery Training Device: created penetrating diaphragmatic trauma and bowel traversal modules for a low-cost surgery simulator to be sent to underfunded hospitals across Africa, through ALL-Safe. It received $700,000 grant for continued research and distribution
- Temperature Sensing Cast Removal Device: built a device that senses high cast cutting blade temperatures and elicits an LED response at failure
- Manufactured Abscess models as well as Fundamentals of Vaginal Surgery models for distribution to various universities
- Collaborated with biomedical engineering students and professionals in the medical field to design teaching tools and simulations used by the Michigan Medicine Clinical Simulation Center

University of Michigan   **Ann Arbor, MI**
Instructional Aide, Biophysical Chemistry and Thermodynamics   *August 2023 – May 2024*
- Held office hours and assist students with coursework as well as provided mini lessons
- Graded and wrote homework problem

Huron Valley Ambulance   **Ann Arbor, MI**
Emergency Medical Technician   *January 2022 – May 2022*

SKILLS

- C++, C, Python, MATLAB, Julia, Streamlit, Docker, HTML, SQL, Java
- Fusion360, SolidWorks, COMSOL, LabView, Circuits, Soldering, 3D Printing, Silicone Working, Change Control, MS Office
- Agile method for Project Management, Web App Development, Biomedical Instrument Design, DHF and User Need Consolidation, Market Segmentation and Analysis, Quantitative modeling and experiments using MATLAB, Wet Lab management and skills, Integration of ethics in AI, Programming Data Structures and Algorithms

EXTRACURRICULARS

BME DEI Committee - Student Representative   **Biomedical Alumni Committee –** Senior Member
Delta Epsilon Mu, Professional Fraternity – Treasurer   **VictorCrypto, Cryptography Club –** Vice President & Founder
Taekwondo - Instructor, Demonstration Team, Elite A1 Poomsae team, All American, UMich Poomsae Captain