Raemalin J. Basurto

(915) 479-1723 | rjhancock2@miners.utep.edu | El Paso, TX (Willing to relocate)

EDUCATION

Bachelor of Science in Mechanical Engineering — Anticipated Graduation Date: 05/2026
University of Texas at El Paso (UTEP) — Overall GPA: 3.64/4.00

SKILLS

- Autodesk Inventor | 3D CAD Software
- Autodesk Fusion 360 | 3D CAD Software
- AutoCAD | CAD Software
- Siemens NX | 3D CAD Software
- 3D Printing | Maintenance/assembly of 3D printers (FDM) and cloud-based and software-based slicers
- Python | Programming Language. Experience with post-flight data management and compilation
- Breadboard & Soldering | Technical Skills
- MS Suite | Outlook, PowerPoint, Word, Excel, and Teams

EXPERIENCE

UTEP Aerospace Center — **09/23-Present**
-Undergraduate Researcher. Dr. Amzad Hossain. — El Paso, TX

- Design models and P&ID's, sourcing materials, hardware and equipment for use on test stands.
- Devise technical documents including safety and emergency response documents and implement standard operating procedures for testing. Assess and present different risks in different systems.
- Coordinate with different safety professionals, technicians, and engineers. Edit technical documentation to reflect the concerns and suggestions of said professionals. Attend recommended training courses.
- Confer with professionals about the applications of hardware and instrumentation. Produce the designed test stands to the required specifications.
- Create and use mathematical simulations to establish estimates of nominal behavior for test stands. Interpret the data to determine edits necessary for technical documentation.
- Run and troubleshoot tests to deliver valuable data to the team. Support data processing to extract useful data.
- Regularly deliver findings in a professional and organized manner. Discuss findings and action items to complete in future.

The Solid Rocket Design Workshop — **08/23**
-Participant. Pat Lampton. UTEP Aerospace Center. — El Paso, TX

- Enhanced knowledge about the inner workings of solid rocket motors for use in aerospace applications.
- Brainstormed in a team to design a solid rocket. Ran through different scenarios to optimize and develop the engine. Presented findings in a professional manner.

EPCC Student Technology Services (STS) — **11/21-10/22**
-Lab Assistant. Calvert Boyle. Makerspace Lab. — El Paso, TX

- Oversaw the 3D printers in EPCC's Makerspace to ensure quality in users' prints and ensure equipment is being operated safely and according to policy. Informed users on the equipment available. Guided users through software slicing.
- Edit important documents for the lab to ensure clarity and foster understanding and education in the lab.
- Executed 3D modeling techniques for a variety of projects including designing storage solutions for the lab, editing 3D designs to operate better, and creating models of furniture manufactured in the lab.
- Facilitated professional relationships with Makerspace users and coworkers.

University of Iowa Edge of Space Program — **07/22**
-Research/Intern. Allison Jaynes & Susan Meerdink. MIRAGE team. — Iowa City, IA

- Flight Integration Manager of Measurements of Ionizing Radiation via Geiger Tube Experiments (MIRAGE) project. Tasked to ensure our system wouldn't interfere with the plane's functions. Supported team effort to troubleshoot problems.
- Learned and demonstrated basic skills required to finish the project such as soldering and circuitry.
- Improved housing design for electronics using 3D modelling skills.
- Analyzed data using Python. Processed and organized the data to deliver findings.

LEADERSHIP

National Aeronautics and Space Administration — **10/19-08/20**
-Systems Engineer. High School Aerospace Scholars. — El Paso, TX

- Collaborated with different teams to ensure proper system integration and an optimal result.
- United peers to keep focused and prompt progress. Communicated with supervisors to update them on progress made.