

NATANIEL CARRASQUILLO

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Education and Certifications:

B.S. Mechanical Engineering – Texas A&M University at College Station. (Aug. 2016 - May 2021)

Web Development Certification – University of Texas at Austin Coding Bootcamp (July 2023- Jan. 2024)

Work Experience:

BAE Systems Inc. (Austin, TX) – Technical Intern May 2018 – Aug. 2018

- Contributed to technical instructional documentation for product assembly and QA.
- Performed lab studies on Printed Circuit Board (PCB) cleaning equipment.
- Collaborated with other interns on a summer-long project to improve new hire website.

Applied Materials (Austin, TX) – Engineering Technician II Aug. 2021 – Dec. 2022

- Performed routine to moderately complex electro-mechanical technical functions and activities such as design, test, checkout, fabrication, modification, troubleshooting, and assembly of electronics and electro-mechanical systems.
- Tested and performed troubleshooting system and component level problems in electrical and mechanical systems and subsystems. Performed new system and NPI installations and field upgrades.
- Worked from schematics, diagrams, written and verbal descriptions, layouts, and plans to perform routine testing and troubleshooting. Compiled logbooks and test procedure documentation.
- Observed all safety standards, maintaining a secure, safe, clean, and healthy work environment.

Daifuku America Corporation (Austin, TX) - Field Services Engineer Dec. 2022 - present

- Worked in Samsung Austin Semiconductors (SAS) clean room fabrication plant to maintain Daifuku and/or other Automatic Material Handling System (AMHS) equipment as a member of the sustaining support team at the customer's facility.
- Proactively looked for, identified, and resolved daily issues and prevented downtime in production.
- Performed error recovery, equipment repairs and installations of any assigned Continuing Improvement Program (CIP) modifications and upgrades.
- Performed troubleshooting, diagnosis, and documentation of errors and equipment abnormalities.

Project Experience:

- Sophomore year: worked in a 3-person group as programmer and designer for a simulated Mars Rover landing simulation programmed using MATLAB.
- Junior year: worked in a 3-person group as a designer, programmer, and mechanical analyst for a 6-cylinder 4-stroke motor assembly designed in SolidWorks CAD software.
- Senior year: mechatronics project developing a 3-link manipulator arm robot using ROS and Python.
- Senior year: double-semester 5-person capstone project to improve tritium production in Pacific Northwest National Laboratories' nuclear reactor.

Proficiencies and Skills:

- Programming and simulation software:
 - MATLAB
 - LabView
- Web development and coding:
 - HTML, JavaScript, and CSS
 - Python
 - MongoDB, Express, React, Node (MERN)
 - .NET framework C# and C+
- Engineering CAD software:
 - AutoDesk AutoCAD
 - AutoDesk Inventor
 - AutoDesk Revit
 - SolidWork
- Leadership and communication in team-oriented environments.
- Hands-on industrial manufacturing experience in high-production, fast-paced settings.
- Proficient in Microsoft Office and Google Suite.
- Fluent in Spanish.