

Ethan Joyner

Mechatronics Engineering Graduating Senior at Morgan State University interested in Mechatronic Systems and Systems Engineering Research.

EDUCATION

Morgan State University, Baltimore City, MD — *B.S. Mechatronics Engineering*
Expecting Graduation FALL 2025

Community College of Baltimore County, Baltimore County, MD — *Computer Engineering*
FALL 2019 - SPRING 2021

EXPERIENCE

Test and Evaluations Engineer, Patuxent River Naval Base, MD — *Lockheed Martin*
September 2024 - December 2024 (Clearance: Secret)

- Created and analyzed aircraft performance predictions for monitoring safety limits
- Monitored in-flight aircraft parameters from a mission control room
- Aggregated data for trends and patterns for future testing

Summer Games Intern, Greensboro, VA — *Booz Allen Hamilton*
MAY 2024 - AUGUST 2024

- Team leader for a ten-week consulting sprint
- Utilized AR and immersive technologies
- Presented solutions to client representatives and senior presidents

Mechatronics Student Researcher, Baltimore City, MD — *Morgan State University*
JUNE 2022 - MAY 2024

- Participates in research dealing with model predictive control path planning
- Teacher assistant for introductory mechatronics courses
- Provided summarized bi-weekly reports on current research findings and summaries

Electromechanical Assembly Technician, Baltimore City, MD — *Galen Robotics*
JANUARY 2022 - FEBRUARY 2024

- Assembles, debugs, and calibrates several surgical robots
- Revises work instructions for future improvements of assembly and part fabrication

EXTRACURRICULARS

American Society of Mechanical Engineers; Morgan State University; School of Engineering Co-Chair / Founder, Baltimore City, MD — *Morgan State University*
JUNE 2024 - May 2025

- Facilitates monthly general body meetings with industry and professional development
- Lead a competition team to learn and compete in a 4-month sprint

Volunteer Mentor, Baltimore City, MD — *FIRST Robotics Competition - Baltimore Bolts*
JUNE 2022 - MAY 2024

- Presents active and engaging lectures to facilitate student learning in mechanical design, engineering workflows, and website development
- Assesses students' learning and development in general engineering, programming, and CAD and Simulation
- Coordinated project activities regarding rapid prototyping in robotic development and manufacturing

Baltimore, MD

(443) 440-1747

etjoy1@morgan.edu

ethanjoyner.xyz

SKILLS

Secret Clearance (Init Fall 2024)

CAD and Simulation

SolidWorks

OnShape

SimScale

LTSpice

Workflow and Technical Software

GitHub

Microsoft Suite

Google Suite

PROJECTS

The Cornhole Robot is a commission to get people to have fun playing with robots and learning how to program them.

Project S.T.A.R.V.E is a senior design stealth reconnaissance UGV that can obtain the GPS position of objects, using a camera and a range finder.

PROGRAMMING LANGUAGES

Java

Python

C and C++

MATLAB and Simulink

LabView