

Keertik Bacon

3319 Debra Ct., Ellicott City, MD 21042 | (410) 375-0069 | kbacon32@gatech.edu | US Citizen | DOE L Clearance

Objective

Driven and self-motivated mechanical engineering student with experience in product development and manufacturing, with strong interpersonal, communication, and leadership skills. Versatile and adept at collaborating with multi-disciplinary teams, working in high-paced environments, and problem solving. Looking for an engineering internship starting Summer 2023.

Education

Georgia Institute of Technology | Atlanta, GA

Bachelor of Science in Mechanical Engineering, GPA 3.85

Minor in Aerospace Engineering

August 2020 – Present

Expected Graduation, Dec. 2024

Skills

Computer-Aided Design: SolidWorks, Autodesk Inventor, PTC Creo, Finite Element Analysis (FEA), Computational Fluid Dynamics (CFD)

Manufacturing: 3D printer, laser cutter, CNC mill, metal and wood shop tools

Electronics: Arduino UNO, programmable logic controllers (PLC)

Programming: Java, Python, C++, MATLAB, HTML, CSS

Certifications: Certified SolidWorks Professional – Mechanical Design (CSWP)

Other Software: Cura, 3DPrinterOS, GrabCAD, Microsoft Office, Inkscape, GitHub, Blender

Communication: Presentations (large and small audiences), written communications, engineering documentation

Languages: English (native), French (conversational), Tamil (conversational)

Experience

American Honda Motor Company | Anna, OH

August 2022 – Present

Student Associate, Drivetrain Manufacturing Department

- Redesigning and prototyping latching mechanism in rejected parts outflow bin to mitigate issue of bin lid closing in a misaligned manner, decreasing troubleshooting time and thus increasing assembly line efficiency
- Developing vision system to detect incorrect assembly of transmission pulleys, enabling faster recovery from mistake

Naval Nuclear Laboratory | West Mifflin, PA

June – August 2022

Technical Intern, Thermal-Hydraulic Technology/Engineering

- Designed and oversaw construction of hydraulic loop to check calibration of flow meters, decreasing calibration time from 6 months to a few hours

Relevant Coursework

Engineering Graphics: Concept sketches; computer-aided design; engineering drawings

Dynamics of Rigid Bodies: Kinematics and kinetics of particles and rigid bodies in one, two, and three dimensions; Newton-Euler equations; work-energy and impulse-momentum principles

Creative Decisions and Design: Product development (research, design, testing); manufacturing; mechatronics and robotics design; design reviews; group project work

Activities

RoboJackets | Atlanta, GA

September 2020 – Present

Shop Manager (December 2021 – Present)

- Embarked on machine shop modernization initiative by replacing old and dwindling tool supplies, and in the process of designing new shop layout and sheet stock storage, to improve space efficiency
- Manage \$1000 shop tooling budget and submit periodical bill requests for funding, to ensure that all five RoboJackets teams and 415 dues-paying members have access to the tools they need to work and meet competition deadlines

RoboRacing Mechanical Engineer (September 2020 – Present)

- Designed mounting hardware and waterproof casing for an autonomous go-kart braking system, helping the go-kart win 2nd place at the 2021 evGrand Prix Autonomous competition
- Led a team of two new members in redesigning the go-kart braking system for the 2022 competition, enabling more precise control over the brakes and reducing motor strain