

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 2024.

Education

Georgia Institute of Technology | Atlanta, GA

Bachelor of Science in Mechanical Engineering, GPA 3.89

Minor in Aerospace Engineering

August 2020 – Present

Expected Graduation, Dec. 2024

Skills

Computer-Aided Design (CAD): SolidWorks, Autodesk Inventor, Fusion 360, PTC Creo, CATIA

Computer-Aided Engineering (CAE): 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, MATLAB

Certifications: Certified SolidWorks Professional – Mechanical Design (CSWP)

Other Software: Cura, Microsoft Office, GX Works, Inkscape, GitHub, Blender

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

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

Experience

Honda Development and Manufacturing of America | Raymond, OH

August 2023 – Present

Chassis Development Co-Op, Auto Development Center

- Designing, analyzing, and prototyping test wheels to assist in evaluating aerodynamics of electric vehicle wheel covers in a wind tunnel

Honda Development and Manufacturing of America | Anna, OH

August – December 2022

Drivetrain Manufacturing Co-Op, Anna Engine Plant

- Designed latch for rejected parts outflow bin to replace a design prone to misalignment, reducing troubleshooting time
- Implemented camera system to detect incorrect assembly of CVT pulleys, enabling earlier detection and faster recovery
- Developed electronic checklist to aid line operators in resetting assembly robots after errors, reducing the likelihood of mistakes that could lead to further errors and potentially cause parts to collide and become damaged

Naval Nuclear Laboratory | West Mifflin, PA

June – August 2022

Hydraulic Engineering Intern, Bettis Atomic Power Laboratory

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

Relevant Coursework

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

Fluid Mechanics: Pipe flow; lift and drag; supersonic airflow; nozzles and diffusers

Machine Design: Mechanical component design (gears, fasteners, springs, shaft components); static and fatigue failure

Activities

Invention Studio at Georgia Tech | Atlanta, GA

March 2022 – Present

Prototyping Instructor

- Assist and train Georgia Tech students in the safe use of various machine tools, including 3D printers, laser cutters, waterjet cutters, metal and wood shop tools, and crafts tools, in the nation's largest fully student-run makerspace
- Give tours of the space to visiting professors, industry sponsors, and newly admitted students, to increase visibility and accessibility of the studio