

ROYCE BENDURE

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Johns Creek, GA | Blacksburg, VA

EDUCATION

Virginia Tech

Blacksburg, VA

GPA: 3.73 / 4.00 | Dean's List | B.S. in Mechanical Engineering | Expected Graduation June 2028 *Aug. 2024 – Present*

Relevant Coursework: Statics, Dynamics, Thermodynamics, Electrical Theory, Manufacturing Processes Lab

EXPERIENCE

Andersen Corporation | \$3B leader in premium windows and doors

Luray, VA

Manufacturing Engineering Intern

Summer 2025

- Independently created and installed a pneumatic blow-off system, increasing CNC router output by 20+ doors per shift (17%), reducing off-spec doors from scratches, and easing operator workload.
- Designed and personally fabricated a pneumatic tilt table using Autodesk Inventor, multi-axis mills, and MIG welding to move 1,000lb panels for 500+ daily cycles, cutting operator strain and improving ergonomics.
- Implemented a chip-guarding system for a Schelling saw, reducing component wear and extending service life by 40%, saving approximately \$15,000 annually, plus minimizing downtime costs.
- Delivered and presented my internship capstone of 10 independent projects to four levels of engineering management, including the top VP; final report archived as a future training resource.
- Developed technical drawings, storage systems, and drip tray modifications that improved line efficiency, reduced maintenance time, and simplified cleaning processes.
- Collaborated daily with on-the-floor production staff, maintenance teams, and supervisors to translate technical designs into practical shop-floor improvements; received positive unsolicited feedback.

Science Wiz | Interactive STEM education workshops for K-8 students

Atlanta, GA

Science Instructor

Summers 2022, 2023, 2024

- Independently delivered STEM education across the Greater Atlanta area, inspiring thousands of students through entertaining and engaging hands-on experiments at schools and camps.
- Achieved top rebooking rate in Summer 2024 by tailoring instruction to student interests and classroom dynamics.
- Managed full program logistics, including lesson delivery, technical setup, materials preparation, and multi-site travel.

PROJECTS AND ACTIVITIES

AutoBoat Design Team, Virginia Tech

Aug. 2025 – Present

- Collaborated with electrical and controls subteams to develop mechanical systems for competition sailboats and autonomous electric jet skis in the Robotic Sailing Regatta and PEP competitions.

Personal Projects

Aug. 2020 – Present

- Designed and built high-performance RC cars, drones, and FPV aircraft with custom LiPo power systems, motor controllers, and real-time telemetry.
- Rebuilt and modified engines and vehicles from 4-stroke go-karts to turbocharged cars, focusing on performance tuning.

SKILLS AND INTERESTS

- **CAD & Simulation:** Autodesk Inventor, SolidWorks, Fusion 360, basic FEA/CFD
- **Programming & Software:** MATLAB, Python, Industrial PLCs/programming (Allen-Bradley), PowerPoint, Google Cloud
- **Fabrication & Manufacturing:** MIG/Stick Welding, Casting, CNC Machining, 3D Printing, Lean Manufacturing
- **Systems Engineering:** Pneumatics, Hydraulics, Mechatronics Integration, Industrial Equipment Retrofitting
- **Personal Interests:** Automotive Engineering, Motorsports, Fishing/VT Fly Fishing Club, Golf, Weight Training