

Ricky Jones

Undergraduate Mechanical and Nuclear Engineer

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Objective

Dedicated engineering student with several years of independent experience in programming, CAD, and project development. Focused on building meaningful connections with professionals throughout the RVA area and strengthening key skills to maximize capabilities. Well-versed in CAD software such as SolidWorks, programming languages including Java, Python, Typescript, and C++, and cooperating in a team environment. Currently seeking an internship to complement coursework and prepare for a future in engineering.

Education

Virginia Commonwealth University,
Aug 2023 - May 2027

Bachelor of Science in Mechanical Engineering,
Concentration in Nuclear Engineering

Dean's List: Fall 2023 - Present

GPA: 4.0

Relevant Courses

Dynamics & Kinematics (EGMN 201)

Engineering Visualization/CAD (EGMN 110)

Differential Equations (MATH 301)

Multivariable Calculus (MATH 307)

Computational Methods (EGMN 210)

Physics I and II (PHYS 207 & 208)

Interpersonal skills: Teamwork, leadership and effective communication, conflict mediation and resolution.

Computer skills: SolidWorks, KiCad, MATLAB, PyCharm, Firebase, OpenCV, Git and GitHub, Excel.

Programming languages: Java, JavaScript/TypeScript, Python, HTML/CSS, C++, SQL, Go, Visual Basic.

Technical skills: Experience working with power tools and shop equipment, 3D modeling and printing, interpreting control and system diagrams, experienced in wafer photolithography.

Relevant Work Experience

Undergraduate Research Intern, Virginia Microelectronics Center, Richmond, VA (Oct 2023 - Present)

- Assisted graduate student with research regarding etching process acceptance, including photolithography and etching for silicon wafers in a research-grade clean room. Resulted in successful process acceptance from Oxford Instruments.
- Maintained and managed glassware and chemical inventory. Regularly measured particle counts to maintain a Class 1000 clean room. Experienced in handling lab chemicals and hazardous waste.
- Maintained wafer fabrication equipment in the clean room and ensured positive facility status.

Engineering Intern, Jefferson Lab Particle Accelerator, Newport News, VA (Jun 2022 - Jul 2022)

- Analyzed dozens of control diagrams from the facility's low-conductivity water system and cooling towers as well as their associated sensors. Applied failure analysis of each component along several points of failure to determine criteria for a predictive maintenance system.
- Performed analysis of low-conductivity water systems found at other particle accelerator facilities and commercial projects to determine historical points of failure to factor into analysis.

Student Organizations

Hyperlabs - Mechanical Team Member, VCU

Aug 2023 - Present

- Member of mechanical team, designed chassis for an autonomous navigation competition.
- Fully designed prototype in SOLIDWORKS to provide cost analysis to organization executives.

Technology-Student Association - President, Clover Hill

Sep 2021 - Jun 2022

- Founded local TSA chapter, serving as the president and chief organizer.
- Offered guidance and assisted several students with their personal projects.

Additional Work Experience

Cashier/Food Prep, Mission BBQ, Midlothian, VA

Jul 2022 - Aug 2023

- Handled orders, processed payments, greeted and interacted with customers throughout their experience. Exercised effective communication and conflict resolution with coworkers.
- Lead several training sessions with employees. Recognized by management for proficiency in training new hires and establishing their underlying responsibilities in a cooperative and supportive manner.