Rajan Patkar

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Personal Summary:

I am a results-oriented college student with proven communication, analytical, problem-solving, and programming skills. I aim to leverage my abilities gain experience with internship and co-op work opportunities. I am an efficient team player who delivers in demanding situations.

Work Experience:

STEM Student Trainee at Caterpillar (Jun. 2021 – Aug. 2021):

- Automated testing of calibration software for hydraulic excavators
- Used MATLAB to test programs in all separate parts of machine controls calibration tool
- Optimized simulation and testing for speed and accuracy, documented solutions
- Worked within a team to deliver programs ahead of schedule for fall software release

Education:

University of Illinois at Urbana-Champaign (UIUC) (Aug. 2021 – May 2025):

- Pursuing Bachelor of Science in Computer Engineering

Illinois Mathematics and Science Academy (IMSA) (Aug. 2018 – Jun. 2021) – 3.81 H.S. GPA:

- Graduated from the #1 ranked Illinois high school (niche.com), focused on STEM
- Successfully completed college-level math, physics, and computer science courses
  - Linear Algebra, Object Oriented Programming, Modern Physics, Calculus-Based Physics, Multivariable Calculus, BC Calculus, etc.
- Finished mathematics research project on self-duality of k-Schur basis (160+ hours)
- Concentrated heavily on volunteering and community service (291.3 service hours)

Dunlap High School (Aug. 2017 – May 2018)

Volunteer Experience:

Technology Development Volunteer Intern at The Farmlink Project (Jun. 2020 – Aug. 2020):

- Non-profit initiative that connected food banks to surplus produce from farms
- Built automated tax deduction tool for farmers' donations with Google Apps Script

Volunteer for FIRST Robotics (Nov. 2015 – present):

- Mentored middle-school robotics teams on teamwork, robot design, and programming

Skills:

- Proficient in programming languages like Java, Python, JavaScript, MATLAB, Google Apps Script, and HTML/CSS
- Limited working proficiency in Spanish with B1-level written and oral communication
- Skilled in motion control, vision processing, and hardware/software interfacing