PATRICK WILLIAMS

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EDUCATION

University of Notre Dame | Notre Dame, IN   May 2027
Bachelor of Science   *GPA: 3.885*
Major: Computer Science
Minor: Engineering Corporate Practice

University of Notre Dame Engineering Study Abroad | Alcoy, Spain   May – Jun. 2024
Study Abroad Experience
- Integrated into a six-week study abroad program in Spain and refined strong cross-cultural communication skills
- Built solid technical skills in 2 engineering courses at the Polytechnic University of Valencia at Alcoy
- Employed and improved Spanish language skills through daily interactions with local students

PROJECTS

Rubik's Cube Trainer | Personal Project   Jul. 2025 - Current
Personal Project
- Developed an interactive Python application for guiding users through solving 3x3 and 2x2 Rubik's cubes
- Built a Pygame-based UI with intuitive navigation between cube-solving stages and algorithms
- Created 25+ custom-rendered cube graphics to illustrate all algorithmic cases with clear, color-coded visuals

Yahtzee | University of Notre Dame   Aug. – Dec. 2024
Independent Project
- Constructed a Yahtzee game using C programming language, writing 800+ lines of code and implementing a graphical display to promote smooth user interaction

EXPERIENCE

DM^2 Research Lab | Notre Dame, IN   Aug. 2025 – Current
Undergraduate Research Assistant
- Conduct research on applying LLMs to analog circuit design and verification
- Run and optimize a framework for component identification and SPICE netlist generation, and contribute to development of output evaluation metrics

University of Notre Dame RecSports | Notre Dame, IN   Aug. 2024 – Current
Operations Supervisor (promoted from Rec Attendant)
- Oversee 2-3 Rec Attendants per shift, control delegation of tasks, and direct training activities for new employees
- Communicate directly with professional staff to ensure proper facility management
- Complete Red Cross certification and administer first aid to injured patrons

LEADERSHIP AND ACTIVITIES

St. Andre Welcome Weekend Committee | Notre Dame, IN   Mar. – Aug. 2025
Co-Chair
- Directly oversaw training and volunteering for a committee of 15 members
- Brainstormed events to foster community for 65+ new students
- Collaborated with neighboring dorms to sponsor larger community-building events
- Designed a creative t-shirt for use by the committee and new students

FCCLA VASD Food Drive | Verona, WI   Aug. 2022 – Jan. 2023
Director
- Chaired the local Food Drive as the leader of a board of directors overseeing 100+ volunteers
- Oversaw the collection and distribution of over 25,000 lbs. of food to a local food pantry
- Volunteered over 100 hours to the sorting of food and management of the drive

TECHNICAL AND LANGUAGE SKILLS

- Technical: Proficiency in Python, Pygame, C, Git, Shell, Microsoft Office, Linux, SolidWorks, and MATLAB
- Language: Conversational Spanish