

# PATRICK WILLIAMS

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## EDUCATION

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

May 2027  
GPA: 3.88

**University of Notre Dame Engineering Study Abroad** | Alcoy, Spain

May 2024 – 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. 2024 – 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<sup>2</sup> 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. 2025 – 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 C, Python, Git, Pygame, Shell, Microsoft Office, Linux, SolidWorks, and MATLAB
- Language: Conversational Spanish