# 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 Proiect

- 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

### **LEADERSHIP AND ACTIVITIES**

# St. Andre Welcome Weekend Committee | Notre Dame, IN

Mar. 2025 - Current

Co-Chair

- Directly oversee training and volunteering for a committee of 15 members
- Brainstorm events to foster community for 65+ new students
- Collaborate with neighboring dorms to sponsor larger community-building events
- Design 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

#### **EXPERIENCE**

# DM<sup>2</sup> Research Lab | Notre Dame, IN

Aug. 2025 - Current

Undergraduate Research Assistant

Examine LLM solutions to automated analog circuit design and verification

### University of Notre Dame RecSports | Notre Dame, IN

Aug. 2024 - Current

Operations Supervisor

- Oversee 2-3 Rec Attendants per shift and control delegation of tasks
- Communicate directly with professional staff to ensure proper facility management

# Rec Attendant

- Control patron access to recreational facilities on campus
- Complete Red Cross certification and administer first aid to injured patrons
- Stock over a dozen stations with proper cleaning equipment and collect data regarding equipment usage

### **TECHNICAL AND LANGUAGE SKILLS**

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