

YASH DATAR

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Education

Bachelor of Science: Computer Engineering

Expected in 05/2028

University of Wisconsin-Madison

Selected Coursework: Linear Algebra | Programming 3(Java- Data Structures) | Intermediate Spanish (4th Semester) | Assembly Language (Introduction to Computer Engineering-ECE252) | Digital System Fundamentals (Verilog) | Discrete Mathematics

Skills

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| <ul style="list-style-type: none">• <code>mySQL</code>, Python, Java, Javascript• Qwik, Deno.js, Typescript with JSX• A/B testing, Supabase• Altium, PCB design• Git, GitHub, Relational Databases• Technical communication | <ul style="list-style-type: none">• Agile adaptability• Detail-oriented• Problem-solving• Team collaboration• Time management• Continuous learning |
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Experience

Web Application Developer Intern

06/2025 to 08/2025

Findr AI

Madrid Spain

- Developed and deployed 10+ interactive data dashboards using Python (Pandas, Plotly) and Tableau, improving business reporting efficiency by 40% across departments.
- Engineered scalable backend systems with Node.js and SQL, enabling automated data processing pipelines that handled over 1M records monthly with 99.9% accuracy.
- Conducted statistical analysis and A/B testing on user behavior data, resulting in a 15% increase in feature adoption and data-driven product iterations.
- Built and maintained RESTful APIs for data integration across platforms, reducing manual reporting time by 30% and improving data accessibility for analytics teams.
- Collaborated with engineering and product teams in Agile sprints to deliver full-stack solutions with data visualization features, shortening the development cycle by 25%.

Grant Writer, Electrical Team Member

09/2024 to Current

Wisconsin Robotics

Madison Wisconsin

- Researched and shortlisted 112 brushless DC motors from RobotShop, ServoCity, and Pololu based on project-specific torque (0.25–12 Nm), voltage (5–12V), and speed (2,000–11,000 RPM) requirements for a multi-joint robotic arm.
- Calibrated motor parameters including current limits, encoder resolution, and velocity gains in the O-Drive firmware, reducing oscillations by 35% during high-torque operations.
- Leading the end-to-end PCB design of a high-performance drone motor controller using Altium Designer, implementing multi-layer power distribution networks and optimized trace routing to handle high-current loads.
- Applied advanced knowledge of BLDC commutation physics to design MOSFET-based inverter circuits and gate driver stages, ensuring efficient energy conversion and thermal management for high-speed motor control.
- Engineered EMI-sensitive layouts by implementing ground planes and signal isolation techniques, bridging the gap between theoretical motor mechanics and physical hardware reliability.
- Authored technical grant proposals that secured funding for electrical prototyping and laboratory equipment by effectively communicating complex engineering constraints and project milestones to stakeholders.

Certifications

Introduction to Data Analytics, LinkedIn Learning

Projects

Wireless Music Control Using Gesture Implementation

08/2023 to 01/2024

- Utilized NumPy and Python to control sound devices via hand gestures
- Implemented gesture recognition system with OpenCV, achieving 90% accuracy in real-time volume adjustments
- Conducted an in-depth study of audio codec theory to ensure seamless integration with system audio controls