

# Amaan Bilwar

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## EDUCATION

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### Bachelor of Science in Computer Engineering 2027

Expected Graduation: April

University of Cincinnati, Cincinnati, OH

Coursework: Digital Design, Engineering Data Structures, Linear Algebra, Multivariable Calculus, Network Analysis, Semiconductor Physics.

**SKILLS:** Python, JavaScript, Java, C++, GitHub, ReactJS, MongoDB, MySQL, Golang, MATLAB, SolidWorks, Octave, LabVIEW, CircuitMaker, Docker, RabbitMQ, Hazelcast, PostgreSQL.

## EXPERIENCE

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### Software Engineering Intern

*Honeywell Integrated*

- Revamped framework architecture, introducing essential versioning protocols for Honeywell's multifaceted tech environment, while collaborating with interns across different time zones.
- Directed reference architecture development, smoothing new client integration amid prior maintenance gaps, and collaborated with advanced software engineers to troubleshoot and resolve emerging issues.
- Achieved mastery in Docker, Spring Boot, Java, unit testing, RabbitMQ, Hazelcast, and PostgreSQL within Honeywell's intricate ecosystem, highlighting adaptability and skill acquisition.

### Software Development Research Assistant– University of Cincinnati

Sept 2023-Present

- Developing a specialized voice analysis web app for non-binary individuals, refining voice nuances. Using Java, Python, ReactJS and MongoDB, I architect a robust backend, managing extensive data.
- Prioritizing user privacy and inclusivity, this project merges technical expertise with social impact, empowering through innovative, personalized voice study.

### Bearcat Motorsports Electric Vehicle Car Team

Aug 2023-Present

- Actively designing and implementing PCB designs for electronic circuit boards on Bearcat Electric Vehicle while meticulously ensuring compliance with industry standards and regulations.
- Collaborating seamlessly with cross-functional wiring teams to provide expert guidance in circuitry and electrical systems. Proficiently engaged in troubleshooting and proactive problem-solving to optimize BEV system performance.

## PROJECTS

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### YT-Sentiment-Analysis — *React, Node, MongoDB, Flask*

June '24-Present

- Developed precise eye-tracking software with the capability to detect signs of drowsiness in individuals and this innovation proves invaluable for deployment at critical traffic junctures and signals, prioritizing heightened vigilance.
- Created software that actively monitors eye movements and alerts the user or relevant authorities in real-time, contributing to enhanced road safety measures.

### spoti-helper — *React, Express, Node, MongoDB*

June '24-Present

- Developed precise eye-tracking software with the capability to detect signs of drowsiness in individuals and this innovation proves invaluable for deployment at critical traffic junctures and signals, prioritizing heightened vigilance.
- Created software that actively monitors eye movements and alerts the user or relevant authorities in real-time, contributing to enhanced road safety measures.

### Drowsiness Detection Software — *Python, Flask, Google Cloud Vision API*

Apr '21-Apr

'22

- Developed precise eye-tracking software with the capability to detect signs of drowsiness in individuals and this innovation proves invaluable for deployment at critical traffic junctures and signals, prioritizing heightened vigilance.

- Created software that actively monitors eye movements and alerts the user or relevant authorities in real- time, contributing to enhanced road safety measures.

## **EXTRA-CURRICULAR ACTIVITIES**

### **Volunteer**

**Sept '22-Oct '22**

- Contributed to fundraising efforts for "Funds for Ashes," an organization dedicated to aiding children's funerals, generating thousands of dollars in support of the cause.

### **Multicultural Activities Organizer 2019**

**July 2018-September**

- Orchestrated multiple cultural and commemorative events for military veterans, concurrently overseeing a team of one hundred students.