

# Mason Baloun

*AI Systems • XR Engineering • Robotics*  
Madison, WI

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## Education

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**University of Wisconsin–Madison**  
Bachelor of Science in Computer Science  
GPA: 3.565

Expected May 2026

## Awards & Recognition

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- **1st Place – Google AI Startup Hackathon** (Generative AI language learning platform)
- **Honorable Mention – MadData26 Hackathon** (XR robotics + edge AI system)
- Finalist team – **Center for AI Policy Advanced AI Expo** (Washington, DC)
- Featured by **UW School of Computer Sciences** and **UW School of Business**

## Experience

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**Tech Exploration Lab – University of Wisconsin–Madison**  
XR Research Assistant

May 2025 – Feb 2026

- Conducted research and prototyping in XR/VR systems and immersive computing technologies
- Developed XR robotics and education demos presented to industry leaders and university stakeholders
- Organized technology showcase events connecting students with engineers, founders, and executives
- Collaborated with Google mentors and industry partners on experimental XR and AI projects

**Center for AI Policy (CAIP) – Advanced AI Expo**  
AI Security Research Contributor & Presenter

Washington, DC

- Selected finalist among teams from 14 universities including MIT and Harvard
- Presented AI safety demonstrations to Congressional staffers at the Rayburn House Office Building
- Built live demonstration showing how generative voice models could flood emergency dispatch systems

## Projects

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### Beyond Words – AI Language Learning Platform (Google Hackathon Winner)

- Built generative AI language learning platform using Google Gemini and Genkit to dynamically generate exercises and evaluate user responses
- Designed gamified system where vocabulary functions as collectible cards in a strategic learning game
- Demo: Video

### Rover XR – XR-Controlled Robotics System

- Built immersive XR interface enabling real-time control of a physical rover
- Engineered low-latency networking pipeline connecting Unity interface to edge device
- Deployed YOLOv8 object detection on Rubik Pi for real-time annotated video streaming
- Demo: Video

### MotionVault – Mobile Motion Capture for Robotics

- Developed Android application converting smartphone video into skeletal motion datasets
- Integrated ML Kit pose detection for markerless human motion tracking
- Built system for recording, storing, and exporting motion data for robotics experimentation
- Demo: Video
- Code: GitHub

## Technical Skills

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**Languages:** Python, TypeScript, Java, Kotlin, C#, JavaScript

**Frameworks:** React, Next.js, Unity, Jetpack Compose

**Technologies:** Gemini, Genkit, YOLOv8, ML Kit, Linux, Networking (UDP/TCP), Embedded Systems, Firebase, Vercel