

America Gaona Borges

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EDUCATION

Bachelor of Arts in Computer & Information Science

Expected May 2026

Berea College - GPA: 3.7/4.0 | Berea, KY

- Relevant Courses: Data Structures & Algorithms, Software Design & Implementation, Autonomous Systems, Human-Centered Computing, Discrete Mathematics, Design & Analysis of Algorithms

EXPERIENCE

Co-Lead Computer Science Teaching Assistant

Aug 2024 – Present

Berea College - Computer Science Department | Berea, KY

- Mentored 25 new TAs, leading onboarding and weekly coordination meetings to provide continued support.
- Contributed to the development of the department website with **HTML/CSS**, & **JavaScript**, creating a central hub of information for students interested in the CS major or its organizations.
- Led tutoring sessions for 20+ students on robotics and game design, improving grades by 30% as measured by a comparison to the previous year.
- Communicated detailed and constructive feedback on capstone project assignments, helping students navigate and solve complex issues related to project scope and feasibility.

Software Engineer Intern

Jun 2025 – Aug 2025

NextGen Justice | San Jose, CA

- Gained hands-on experience developing a full-stack application, architecting backend systems with the **NestJS** framework, storing data in **PostgreSQL** database, and handled the frontend integration with **React**.
- Engineered a complete RESTful API for user settings following a Model-Controller-Service (MCS) architectural pattern, utilizing Swagger UI for streamlined documentation and testing.
- Established a dedicated prompt template service with **LangChain** to enhance Retrieval-Augmented Generation (RAG) pipelines, leading to more accurate and context-aware AI responses.
- Created a **TypeScript** endpoint to generate and store document embeddings using **Ollama** and **pgvector**, enabling scalable semantic search across legal documents.
- Pioneered the application's user experience by hand-sketching and designing the entire UI, defining user flows and page-by-page functionality before translating the complete wireframes into **Figma**.

Robotics Engineering Intern

May 2024 – Jul 2024

Purdue University | West Lafayette, IN

- Built a smart container using **embedded systems** and **ML algorithms** to analyze eating habits.
- Programmed nRF52 microcontrollers in **Embedded C** integrating gyro, accelerometer, and temperature sensors.
- Debugged firmware using **JTAG** and SEGGER Embedded Studio, improving system performance and reliability.
- Authored and presented a paper on communication protocols (**SPI**, **TWI**, **UART**, & **BLE**) to 20+ peers.

TECHNICAL SKILLS

Languages: Python, TypeScript, JavaScript, C++, Embedded C, HTML/CSS

Frameworks & Libraries: NestJS, Node.js, LangChain, React, Prisma, AWS S3

Embedded Systems: Microcontroller Programming, Firmware Development, SPI, TWI, UART, BLE

Tools: Git, GitHub, Docker, JTAG, SEGGER tools, Figma

LEADERSHIP ROLES & CONTRIBUTIONS

Society of Hispanic Professional Engineers | President

Nov 2024 – Present

- Led initiatives and campus events promoting minority engagement in STEM.
- Built a programmable music box with sensors, LEDs, and speakers to celebrate Día de los Muertos.

Girls Who Code | Public Relations Officer

Aug 2023 – Present

- Boosted campus presence and participation to foster mentorship and inclusion in computing.

Hispanic Outreach Program | Language and Cultural Program Volunteer

Aug 2023 – Dec 2023

- Created and led interactive Spanish lessons for adult English learners.
- Developed a **Python**-based translation tool using APIs to enhance multilingual accessibility.