

GISELLE WU

781-970-3149 · giselle.siqi.wu@gmail.com · [LinkedIn](#)

EDUCATION

Dartmouth College, Hanover, NH **June 2027**
GPA 3.75/4.0
Bachelor of Arts in Computer Science Modified With Engineering, Bachelor of Engineering
Relevant Coursework: Full-Stack Development, Digital Electronics, Software Design and Implementation, Problem Solving via Object-Oriented Programming, Introduction to Scientific Computing, Differential Equations

AIT Budapest, Budapest, Hungary **September - December 2025**
Bachelor of Computer Engineering
Relevant Coursework: Algorithms and Data Structures, Mobile Software Development, Theory of Computing, Computer Graphics

TECHNICAL SKILLS

Programming & Frameworks: Python, Java, C/C++, MATLAB, R, JavaScript, React, HTML, CSS, Kotlin
Software & Web Development: Full Stack Development, REST APIs, Responsive Design, UI/UX (Figma), DOM Manipulation
Data & Analytics: Data Structures & Algorithms, Data Modeling, Machine Learning, Statistical Analysis, Data Cleaning, Excel
Hardware & Design : FPGA Development, HDL (VHDL/Verilog), VGA Controller Design, Digital Logic Design, CAD (SolidWorks), CSWA Certified
Languages: English (fluent), Chinese (fluent)

RELEVANT EXPERIENCE

Jacobson Lab, Hanover, NH **May 2025-Present**
Undergraduate Research Assistantships at Dartmouth (URAD) Intern

- Developed and integrated the first text-to-speech (TTS) modules into a cross-platform AI chatbot, enhancing conversational flow and user engagement.
- Built a cross-platform chatbot in Flutter, implementing both frontend UI and backend logic for real-time, smooth performance.

Makerspace, Hanover, NH **May 2025-Present**
Trainee

- Co-lead interactive training sessions on 3D printing, laser cutting, and sewing, and foster collaborative exploration and innovation through making.

Lynch Rocket Lab, Hanover, NH **January 2024-January 2025**
Data Analytics Intern

- Processed Swarm-Over-Poker satellite and radar data using replication method on MATLAB
- Engineered a new computational grid for Discovery by implementing parallel processing techniques, optimizing data preparation for GEMINI simulations on NASA's Pleiades Supercomputer, resulting in a 60% reduction in computation time.

INTSIG, Shanghai, China **June 2024 - August 2024**
Data Analytics Intern

- Streamlined the image processing of training data process by writing a python script
- Streamlined interview scheduling by managing a 1000+ applicant database, reducing time-to-hire by 10%.

SELECTED PROJECTS

Pet Rock VGA Game **August 2025**

- Designed and implemented RTL architecture and state machines in VHDL for a Tamagotchi-style pet rock game on FPGA.
- Integrated and tested VGA display output with full simulation and hardware verified in Vivado, demonstrated strong RTL design, hardware/software integration, and debugging.

Harmonize **May 2025 - June 2025**

- Built a full-stack interactive map** using Leaflet to display nearby friends and events via geolocation, reverse geocoding, and the Ticketmaster API; collaborated in a team of 5
- Implemented "Blend Mode" to calculate music compatibility (shared artists/genres); used React, Zustand, API integration, and debounced async calls for efficient, real-time updates.

Walking Dino **May 2025 - June 2025**

- Designed, built, and tested a mechanical walking dinosaur using a four-bar linkage system modeled in SolidWorks, achieving 100% walking stability over 20+ test trials
- Fabricated over 15 custom parts using 3D printing and laser cutting, resolved all mechanical interferences, and achieved smooth, repeatable locomotion

LEADERSHIP EXPERIENCE

Alpha Xi Delta Sorority, Hanover, NH **January 2025 - Present**
Communications Vice President

- Serves as the house representative for any media contact, created and distributed termly newsletters, managed website, and designed branded gear for 300+ members.

Sheba Dance Troupe, Hanover, NH **September 2023 - Present**
Logistical Director

- Directed logistics for 350+ audition participants across 5 teams, handling scheduling and inter-team communication.