# Alex Melendez

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## EDUCATION

**University of Houston** | Bachelor of Science in Computer Science — Expected, May 2026

- GPA: 3.2/4.0 Major GPA: 3.6/4.0
- Relevant courses: Programming and Data Structures, Operating Systems, Database Systems, Algorithms and Data Structures
- Organizations: Code Coogs, CS Girls, Latinas in Tech, Computing Alliance of Hispanic-Serving Institutions

## SKILLS

**Languages:** C++, HTML, Java Script, CSS, React

**Tools:** Figma, Git/Github, Excel, Office, R, Figma

**Soft Skills:** Creativity, Problem Solving, Leadership, Verbal and Written Communication

## EXPERIENCE

**CAHSI LREU Participant** — Houston, TX

University of Houston, under Professor Guoning Chen — **Feb. 2025 - Present**

- Developed an intuitive interface for the user to specify and modify different geometric and physical constraints for vector field synthesis
- Conducted mentored research as part of CAHSI local REU program
- Developed a research plan, maintained a journal to report on research progress, and created a research poster to disseminate my research results
- Received CAHSI-Computing Research Association (CRA) Scholar Award

**Barnes and Noble** — Houston, TX

Senior Bookseller, Customer Service Specialist — **Aug. 2022 - Feb. 2025**

- Managed customer service issues
- Built customer loyalty by curating and delivering an excellent shopping experience
- Recorded and analyzed trends of membership sign ups and book sales using Excel
- Supervised 30+ employees

## PROJECTS

**Personal Website**

- Created a website to display personal information with a focus on projects and interests
- Incorporates familiar UI designs and animations that emphasizes key information and offers visitors a pleasing browsing experience

**Interface for Prescribing Geometric and Physical Constraints for Vector Field Synthesis**

- Developed an intuitive interface for the user to specify and modify different geometric and physical constraints for vector field synthesis using Js.React
- Integrated the interface with a synthesis framework to produce a smooth and physically authentic vector fields based on the user input and modification