William Houston

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EDUCATION

The University of Chicago

Chicago, IL

Bachelor of Science in Mathematics and Physics

Expected June 2026

GPA: 3.9/4.0

Upper-level courses: Honors Analysis, Honors first-year physics sequence, Honors Algebra, Graduate Electrodynamics

EXPERIENCE

UChicago Mathematics Research Experience for Undergraduates (REU)

Chicago, IL

Participant

June 2023-August 2023, June 2024-August 2024

- Self-directed research, for two summers, into a wide range of high-level content in algebraic topology
- Synthesized research into targeted and concise paper proving a sequence of lemmas about Stiefel-Whitney classes
- In second paper, built on previous understanding to offer self-contained proof of Stiefel's parallelizability theorem
- Communicated complicated quantitative arguments in a way that also highlighted their broader relevance

Brothers Marketplace

Weston, MA

Cashier

June 2021-September 2022

- Processed 100+ customer checkouts daily at medium-sized grocery store
- Oversaw front end, including directing end-of-day closing of stations and authorizing alcohol sales
- Administered \$200-400 loans and cash pickups between central cash system and register drawers

Weston, MA Department of Public Works

Intern

Weston, MA May 2022

- Reviewed site plans for stormwater permit applications in order to preliminarily evaluate suitability of permits
- Catalogued and digitized Orders of Taking for public roads and incorporated them into town GIS system to facilitate more efficient communication regarding future engineering projects
- Organized town archive to provide department more efficient access to details of past projects

LEADERSHIP & ACTIVITIES

Quizbowl Teams

September 2018-present

- Participated in team vs. team academic trivia competitions involving both speed recall and team collaboration
- Play multiple tournaments each quarter at UChicago, including 2024 ACF National Championship
- Elected to serve as Community Chair and organize social events and transportation during upcoming school year
- Served as captain on high school team, including leading team to 2022 High School National Championship

SKILLS

Computer: Proficient in Python, Java, Microsoft Office (Word, Excel, PowerPoint), and LaTeX

Language: Conversational in Spanish (received Seal of Biliteracy, 2022) **Hobbies:** Play the cello and the piano, enjoy traveling, skiing, and baseball