

# Tanner Weston Hornsby

5432 S University Ave  
Chicago, IL 60615

(940)-536-8072  
thornsby@uchicago.edu

---

## EDUCATION

*Computer Science with Specialization in Computer Systems*

September 2020 - September 2024

**University of Chicago**, Chicago, IL

*Relevant Coursework: Algorithms, Database Systems, Computer Systems, Probability, Abstract Linear Algebra, Analysis*

## WORK EXPERIENCE

*Software Engineer Intern*

June 2023 - September 2023

**Data For The Common Good**, Chicago, IL

- Worked with a fast paced team under agile workflow to roll out continuous improvements in the patient-trial matching software.
- Extended REST API to collect user input on trials.

*Research Assistant*

June 2018 - August 2020

**Energy Engineering Lab at the University of North Texas**, Denton, TX

- Aided in the design of an ultrasonic anemometer for use in the wind lab.

## ACTIVITIES

*Founder and Captain of UChicago Robotics Club*

August 2020 - January 2022

**University of Chicago**, Chicago, IL

- Led the growth of the club, expanding membership from 3 to 50+ within the first 3 months.

*Athletics Director of Phi Delta Theta Fraternity*

May 2022 - September 2023

## PROJECTS

*CrustyDB* | [repo](#)

A Relational Database Management Software built with Rust, Crusty accepts complex SQL statements and efficiently retrieves the requested data. It is implemented on heap files using a custom storage manager, and a query parser and optimizer. We ensured concurrency control through the two-phase locking protocol and tiered locking. Leveraged the volcano model for efficient query building and optimization, ensuring optimal performance on school servers.

*Battleship* | [repo](#) | [demo](#)

An in-browser battleship game built with Javascript that has player vs player, easy, and hard modes. The hard mode implements bayesian search and parity weighting, improving the average time to win from 97 moves to 56.

## HONORS & SKILLS

- Eagle Scout
- Extensive ML & DS work using the following Python libraries: TensorFlow, PyTorch, Pandas, and NumPy.
- Skilled at full-stack development with React.js, Node.js, Next.js, Prisma.js, AWS, and Flask.
- Proficient in C/C++, Python, Rust, SQL, Javascript/Typescript, HTML, and CSS/SCSS.
- Experienced with Linux OS, Docker, and Raspberry Pi.