

# Dayi Ethan Dong

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## EDUCATION

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**Yale University**, New Haven, CT; Class of 2024

- B.S. Engineering Sciences (Mechanical) and B.S. Computer Science; Cumulative GPA: 3.91; Major GPA: 3.97
- CPSC 223: Data Structures & Programming Techniques, CPSC 323: Introduction to Systems Programming and Computer Organization, ENAS 194: Ordinary and Partial Differential Equations with Applications, CPSC 365: Algorithms, MENG 185: Mechanical Design

**Madison West High School**, Madison, WI; Class of 2020

- Cumulative GPA 4.00
- 2020 US Presidential Scholar, National Merit Finalist, Dean's List Semifinalist (FIRST Robotics), National AP Scholar, All American Academic, All American Swimming, Scholar-Athlete Recognition, Wisconsin Academic Excellence Scholar

**UW Madison**, Madison, WI; Dual Enrollment during high school

- Cumulative GPA 4.00
- Math 234: Calculus – Functions of Several Variables, Math 340: Elementary Matrix and Linear Algebra, Computer Science 300: Programming II

## RESEARCH EXPERIENCE

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**Yale University School of Engineering and Applied Science**, *Student Researcher*, New Haven, CT, 2022

- Conducted research in Professor Abraham's Intelligent Autonomy Lab on multi-agent robotic experiments and validating algorithms for safe active search and exploration

**UW Madison Mechanical Engineering**, *Research Intern*, Madison, WI, Summer 2019

- Redesigned, programmed, tested, and analyzed a rimless-wheel robot to understand energy efficiencies of hip-driven walking versus ankle-driven walking

## WORK EXPERIENCE

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**Ringle**, *English Tutor*, Virtual, 2022

- Worked with adult professionals from various Asian backgrounds to help improve their spoken and written English fluency.

**Alexander Academy**, *Academic Tutor*, Atlanta, GA, 2021/2022

- Tutored high school students one-on-one in standardized tests (ACT, SAT)

**Birdwell Solutions**, *Intern*, Madison, WI, Summer 2020 & Fall 2021

- Helped with front-end and back-end development on their mobile app
- Researched and logged data for clients
- Wrote technical documentation for clients' projects

**West High School**, *Academic Tutor/Planner*, Madison, WI, Summer 2020

- Assisted high-school students facing academic difficulties because of the COVID-19 pandemic
- Planned and created learning resources directed towards first generation low-income students

**UniMatch**, *Data Analyst & Marketing Coordinator*, International, Summer 2020

- Worked on a start-up with other high-school and undergraduate students to design a system to match students with their best-fit college

**Hill Farm Swim Club**, *Lifeguard*, Madison, WI, Summer 2019/2020

- Guarded the pool, taught swim lessons to young swimmers, opened and closed the pool

## VOLUNTEER/LEADERSHIP EXPERIENCE

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**Code Haven**, *Treasurer, Events Director, & Classroom Lead*, New Haven, CT, 2020-2021

- Managed finances and purchases
- Planned large interactive events for middle school students and educators
- Led a class of mentors to teach middle-school students Computer Science

**FRC BadgerBOTS**, *President*, Madison, WI, 2018-2020

- Led robot design, robot build, CAD, finances, match strategy, drive coach, team meetings, and logistics
- Led team to "Gracious Professionalism" Award by helping rookie teams from China and Minnesota finish their robots

- Organized a small team to attend the National Advocacy Conference in Washington DC for the first time
- Assisted the establishment of the first FRC teams in Venezuela and Ukraine

**Study Llama**, *Tutor*, Online, International, Summer 2020

- Tutored and helped students with ACT, SAT, SAT II, AP, and college admissions

**Peer Tutoring**, *Peer Tutor*, Madison, WI, 2017-2020

- Helped other students in my high school with various math and science classes

**BadgerBOTS Robotics**, *Volunteer/Event Coordinator*, Madison, WI, 2017-2020

- Volunteered at different outreach and science night events, helped out at regional FIRST Lego League events, managed various aspects of regional events

## **SKILLS**

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- **Computer Programing:** Java, C, Python, Racket
- **Foreign Language:** English, Chinese – Mandarin (Fluent), Spanish (Basic)