# Chris Xu

cxu57@illinois.edu | (224) 216-3292 | Champaign & Chicago, IL | LinkedIn | chrisyxu.com

#### **EDUCATION & HONORS**

## University of Illinois Urbana-Champaign, Grainger College of Engineering

Bachelor of Science in Computer Science + Bioengineering

#### Honors & Awards

- 1st Place CI MED Make-A-Thon: 1st place out of 8 teams, helped to nerve detecting cauterizer
- James Scholar: Selected for a competitive honors program completing advanced academic projects
- FA' 2024 Dean's List: Recognized for academic excellence by achieving a higher GPA than 80% of cohort
- SP' 25 Undergraduate Research Symposium: Planned attendance, placement & awards will be updated
- SP' 25 Engineering Open House: BMES Shoulder Project
- SP' 25 Cozad New Venture: Planned attendance, placement & awards will be updated

## New Trier High School

Aug. 2020 - May 2024

Honor Roll, AP Scholar with Distinction, National Merit Scholarship Semi-Finalist, Eagle Scout, Debate Club

GPA: 5.0 | ACT: 35

Expected May, 2027

GPA: 4.0/4.0

## **SKILLS & RELEVANT COURSEWORK**

- Technical Skills: Java, Python (Tensorflow, Keras, NumPy), C++, C, CAD (Onshape, Fusion360, Inventor), MatLab, HTML, CSS, JavaScript, PostgreSQL, PowerShell Scripting, Network Administration, Circuit Development
- Interpersonal Skills: Collaboration, Teamwork, Team Management, Spanish (Fluent), Chinese (Working Proficiency)
- Relevant Coursework: Java, C++, Data Structures, Computing & Assembly, Discrete Math

## PROFESSIONAL WORK EXPERIENCE

## New Trier High School IT Department

Jun. 2024 - Aug. 2024

Summer Intern Winnetka, IL

- Collaborated with the entire New Trier High School IT Department to refresh devices & apply network wide updates
- Attained experience in PXE booting, PowerShell scripting, & network administration

#### Math Tutoring

Sept. 2021 - May 2024

Various Levels: Mathnasium, New Trier Academic Assistance Center

Winnetka & Kenilworth, IL

- Academic Assistance Center: Selected by faculty as a math tutor based on academic achievement. 300+ taught & assisted.
- Mathnasium: Developed elementary to high school students' skills in mathematics, logic, & problem solving

## LEADERSHIP & INVOLVEMENT

## Illinois Medical Advancements through Design & Engineering (i-MADE)

Sept. 2024 - Present

Software Engineer | Stealth Project | Jan. 2025 - Present

Champaign, IL

- Stealth Project: Worked with on campus startup, Stealth, to create an ML model. Presenting at Cozad & URS
- Utilized the SciPy package & numPy to train an SVM model to determine muscle fatigue & optimal training intervals. CAD Engineer | Sandman Project | Sept. 2024 - Jan. 2025
- Collaborated with an interdisciplinary team to create an at home hospital bed with voice command capabilities
- Designed & simulated using Fusion360 & Inventor with the Gensim package for NLP

#### Biomedical Engineering Society (BMES)

Sept. 2024 - Present

Engineer

Champaign, IL

- Electronic Shoulder Project: Currently developing an electronic shoulder to be exhibited at Engineering Open House.
- Sole developer of the CAD & physical model whilst assisting in the electronic circuit & Arduino code

## First Tech Challenge Robotics: Team 11392

March 2020 - May 2024

Captain & Various Roles

Naperville, IL

- Led a team of 10 students in constructing & coding a fully functional robot specializing in various tasks
- Programmed in Java for core functionalities, OpenCV for image analysis, with OnShape & Fusion360 used for design

#### **RESEARCH**

## **DNA Bendability Model**

Jun. 2023 - Sept. 2023

Research Assistant | Professor Wang (Department Chair; Professor of Statistics and Data Science) Research Group

Evanston, IL

- Created a TensorFlow model to predict the bendability of a segment of DNA given a specific DNA K-mer length.
- Achieved an R-Value close to 0.9 using the TensorFlow package.

#### **STEM Education Policy Review**

Jun. 2023 - Sept. 2023

Main Researcher | Mentor: Ronald Omuthe

Remote | Cambridge, United Kingdom

Conducted a literature review of STEM education policy & its impact on DEI in STEM education. Accepted to NHSJS