

# Mengpang Xing

[Mengpang's Portfolio \(mythventor.github.io\)](https://mengpangxing2027@u.northwestern.edu)

773-971-7922 | [Mengpangxing2027@u.northwestern.edu](mailto:Mengpangxing2027@u.northwestern.edu) | <https://www.linkedin.com/in/mengpang-xing/>

## EDUCATION

---

### Northwestern University

Bachelor of Arts in Computer Science

*Evanston, IL*

Sep 2023 - Anticipated June 2027

Courses: Fundamental of Computer Programming, Data Structure and Algorithms, and Programming Design

## EXPERIENCE

---

### Full-stack developer internship, Y STEM and Chess Inc

*Boise, ID*

Jun 2024 - Sept 2024

- Collaborate with the design team to create and maintain responsive, user-friendly web interfaces for our educational chess platform, ensuring accessibility and a seamless user experience for our diverse user base.
- Build and optimize interactive features and game elements using **TypeScript** with **React** to enhance the learning experience of our students in chess and STEM subjects.
- Conduct thorough testing and debugging to ensure our web applications function flawlessly across different browsers and devices, addressing any compatibility issues promptly.

### STEM Scholar Internship & After-school program, University of Illinois Chicago

*Chicago, IL*

Nov 2022 – Aug 2023

- Collaborated with students from over 20+ high schools in a STEM-Focused program, addressing challenges in engineering, architecture, and sustainable manner.
- Engineered a Rube Goldberg machine, demonstrating proficiency in physics and mechanical engineering principles.
- Participated in civil engineering and architecture projects, acquiring knowledge in structural design and foundation engineering.
- Designed a community solar microgrid model, exploring sustainable energy practices and electrical engineering applications.

### Coding Fun Apprenticeship, Pui Tak Center

*Chicago, IL*

Jan 2023 - June 2023

- Mastered computer science fundamentals, specializing in web development with **HTML**, **CSS**, and **JavaScript**.
- Developed a comprehensive understanding of foundational coding concepts, including web design principles and interactive user interface creation, and interactive web content development.
- Participated in intensive hands-on projects, simulating real-world scenarios to bolster problem-solving capabilities and strengthen teamwork and collaborative abilities.
- Utilized my knowledge in responsive design CSS animation to create functional, user-friendly web applications, demonstrating an ability to bridge theory and practice in software development.

## PROJECTS

---

### Snake Game in DrRacket - <https://github.com/Mythventor/SnakeGame>

Nov 2023

- Implemented game dynamics, including snake movement, food generation, obstacle, and collision detection.
- Utilized binary-search tree data structure to generate game elements and their interaction.
- Designed a responsive game loop for state management, input processing, and rendering.
- Integrated scoring system and end game scenarios to create an engaging gameplay experience.

### Mather High School Chess Website - <https://github.com/Mythventor/ChessWebsite>

June 2023

- Independently developed a chess learning website utilizing skills gathered from Coding Fun Apprenticeship.
- Developed interactive content for chess strategies, openings, and endgame techniques using **HTML**, **CSS**, and **JavaScript**.
- Curated educational content and integrated multimedia resources to enrich the learning experience.

### Chemistry Properties Lookup Tool - <https://shrtm.nu/ChemistryTool>

Mar 2022

- Developed an interactive web application in Code.org and **JavaScript** to assist students in learning detailed information about chemical elements.
- Implemented features for data retrieval and display data such as element name, symbol, atomic number, weight, classification, group, melting and boiling points, density, phase at room temperature, and usage enhancing educational support.

## SKILLS & ACTIVITIES

---

Programming Languages: C, C++, HTML, CSS, Javascript, Python, DrRacket

Activities: President of High school Chess Club, Volunteer in Evanston Public Library