

# TranGiaBao (Claude) Le

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## Education

**DePauw University** – Greencastle, IN

**Bachelor of Arts** in Computer Science and Pre-Engineering - May 2026

**Major GPA:** 3.78/4.0

**Relevant coursework:** Data structure, Object oriented software development, Computer System, Data mining, Web programming & cybersecurity, Artificial Intelligence, Machine Learning, Operating Systems

## Work Experience

### **STEM Guide Tutor | DePauw University | August 2025 – Present**

- Facilitating hands-on learning experiences by assisting students during labs and low-level computational exercises
- Leading personalized office hours to provide targeted academic support, reinforcing student understanding of core systems architecture, machine code, and assembly language programming.

### **Python Teaching Assistant | DePauw University | September – December 2024**

- Mentored and guided students in Python programming, debugging, and mastering problem-solving strategies.
- Provided one-on-one and group instruction on core machine learning concepts such as linear regression, data fitting.
- Collaborated with Professor Townsend to enhance classroom instruction while independently hosting office hours that served as a trusted technical resource

## Leadership & Activities

### **Mathematics Club – DePauw University, IN | Head Videographer**

- Directed and managed a student video team to produce promotional and recap content to increased engagement and visibility for club events.
- Produced cinematic-style trailers to promote the club's annual Escape Room event, enhancing its reputation on campus

### **Physics Club – DePauw University, IN | Treasurer**

- Managed the club's funds as well as hosting fundraising events
- Contributing ideas of events to be hosted annually at DePauw campus, such as articles sharing, astronomy discussions, or physics questionnaire boards
- Maintained a budget of \$3000 and advised on appropriate spending for club events

## Projects (Available on GitHub - PCMakia)

### **HTML File Generator | September 2025 - Present**

- Writing Python coding templates to parse through Markdown files and convert to HTML webpage.
- Simplifying process of generating HTML files, increasing twofold productivity of making large quantities of web files
- Composing inline text, block text on NotePad and compiling those files at terminal to host the result html website.

### **Summer Chemistry Research 3D modeling of molecules | DePauw University | May – August 2025**

- Used ChemDoodle to draw molecules structures and generate their models in Blender.
- Built electron valences orbitals transformation by Blender models according to Signed Distance Field principals.
- Voiced over videos lecture for online Chemistry textbook use in future curriculum of Chemistry education.

### **Alpha-Beta Search AI Development | DePauw University | March 2025**

- Game rule: AI player and human alternatively picks certain number of sticks, and the one that empties the pile wins
- Applied **Alpha-Beta Search** to generate an AI by Python, compiled the file execution through terminal.
- Utilized Python Tkinter and Pyinstaller library to compose an easy approach user interface for the game application.
- Optimized **Breadth-First Search** to **Alpha-Beta Search** which increased the game processing efficiency to 150%.

### **Application Reviews Analyzing Program | September – December 2024**

- Engineered a **Neural Network** model to extract words representing the main idea of all users' feedback on topics
- Transformed raw **UCSD Dataset** objects into structured, tokenized corpora using advanced **Natural Language Processing** techniques for scalable analysis and remaining time efficient.
- Implemented **K-Means clustering** across +200,000 reviews sentences to uncover recurring themes, producing keyword lists for the top 10 most-reviews games on Steam.