

# Sophie Chou

(865) 200-1660 | schou2@nd.edu | Clinton, TN | Website - <https://sophiechou1.github.io/> | LinkedIn - </in/chousophie/>

## EDUCATION

---

**University of Notre Dame** | Notre Dame, Indiana May 2026  
*Bachelor of Science in Computer Science - Minor in Engineering Corporate Practice* GPA 3.856

## EXPERIENCE

---

**Irish Gardens Flower Shop** | Notre Dame, Indiana January 2025 – Present  
*Florist*

- Create and deliver custom and professional floral arrangements while practicing good communication with coworkers and excellent customer service skills

**University of Notre Dame** | Notre Dame, Indiana January 2024 – Present  
*Undergraduate Researcher*

- Research with Notre Dame CSE professor studying transformer-networks and the unique hardware and memory devices that facilitate the machine learning process in collaboration with one other Notre Dame student

**National Science Foundation** | Lyon, France May 2024 – July 2024  
*International Research Experiences for Students (IRES) Intern*

- Studied emerging transformer technologies and the effect of using different in-memory devices and architectures in collaboration with two Notre Dame students and a team of Notre Dame and international PhD students
- Developed a simulator in Python to imitate the transformer-encoding process of emerging model 1FeFET-1C

**Emerald Youth Foundation** | Knoxville, Tennessee May 2023 - July 2023  
*JustLead Tutor*

- Tutored economically disadvantaged children from a local area in math and reading to increase proficiency before the start of the following school year

## LEADERSHIP AND ACTIVITIES

---

**Notre Dame Dance Company** | Notre Dame, Indiana September 2023 – Present

- Manage time effectively while attending multiple hour-long tri-weekly practices while practicing good communication and collaboration with fellow members to prepare for the end of semester showcase

**Society of Women Engineers** | Notre Dame, Indiana August 2022 – Present

- Attend club meetings, participate in SWE events, and provide a supportive environment to network and grow

**Study Abroad** | Dublin, Ireland September 2024 – December 2024

- Completed computer science coursework at Dublin City University in Dublin, Ireland for the 2024 fall semester
- Traveled to six unique countries throughout Europe and practiced independence, resilience, and adaptability

## RELATED COURSEWORK OR PROJECTS

---

**1FeFET-1C Simulator** May 2024 – July 2024

- Collaborated with two other Notre Dame students to create a simulator in Python for the emerging 1FeFET-1C technology which quantifies latency and energy efficiency through the customization of various parameters

**Functional Arduino Alarm Clock** April 2023

- Collaborated with a team of three to develop and build a functional alarm clock using an LCD, Piezo buzzer, LED, and push buttons (and other necessary materials) programmed in Arduino C/C++

**Relevant Courses:** Data Structures, Systems Programming, Operating Systems, Programming Paradigms, Computer Architecture, Theory of Computing, HCI, Intro to AI, Logic Design, Fundamentals of Computing, Discrete Math, Linear Algebra, Probability and Statistics, Integrated Business and Engineering, Intro to Embedded Systems

**Publications:** *Volatile and Non-Volatile CIM Solutions for Transformer Workloads with 1FeFET-1C Memories*

## SKILLS AND INTERESTS

---

**Programming Languages:** Python, C, JavaScript, Bash, R, MATLAB, Haskell

**Other Software:** GitHub, Microsoft Excel, Microsoft PowerPoint, Microsoft Word, SOLIDWORKS, ArduinoIDE

**Interests:** Travel, Fitness, Cooking, Baking, Drawing, Graphic Design