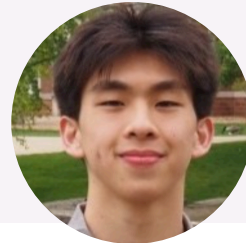# Jeffrey Hu

Material Science & Engineering | Computer Science (CS) Minor

📍 Champaign, IL / Chapin, SC   ✉ jeffreyhusc@gmail.com
📞 [803-979-1692]   in linkedin.com/in/jeffreyhu-tech

EDUCATION

University of Illinois Urbana-Champaign 🌐   📅 Aug 2024 – May 2028

B.S. Material Science and Engineering, Minor in CS   Champaign, IL

- **College:** The Grainger College of Engineering
- **Relevant Skills:** Object-Oriented Programming (OOP), Data Structures, machine learning, vibe programming, data science.

EXPERIENCE

Mechanical Team Member   📅 Sep 2025 – Present

Illini Solar Car   Champaign, IL (On-site)

- Design, manufacture, and validate mechanical systems for a solar-electric vehicle.
- Optimized chassis stiffness and aerodynamics using Siemens NX and CAD tools.

CS124 Assistant Tutor   📅 Sep 2025 – Present

The Grainger College of Engineering   Champaign, IL (Remote)

- Assist students with course concepts in Java and Object-Oriented Programming (OOP).
- Provide academic support to reinforce understanding of data structures and algorithms.

Summer Research Intern   📅 Summer in 2023 and 2024

USC Department of Computer Science & Engineering   University of South Carolina

- Gained hands-on experience with machine learning, specifically focusing on Long Short-Term Memory (LSTM) models.
- Applied deep learning techniques to materials science research contexts including materials property prediction and oxidation state prediction.

PUBLICATIONS

- 📄 Fu, N., **Hu, Jeffrey**., Feng, Y., Morrison, G., Loye, H.C.Z. and Hu, J., 2023. Composition based oxidation state prediction of materials using *deep learning language models*. ***Advanced Science***, 10(28), p.2301011. (IF:14.2)

- 📄 **Hu, Jeffrey**, David Liu, Nihang Fu, and Rongzhi Dong. Realistic material property prediction using domain adaptation based machine learning. ***Digital Discovery*** 3, no. 2 (2024): 300-312.

- 📄 Hu, Jeffrey, and Yuqi Song. "Piezoelectric modulus prediction using machine learning and graph neural networks." ***Chemical Physics Letters*** 791 (2022): 139359.

TECHNICAL SKILLS

Programming & CS

| Java | Python | OOP | Data Structures |

Engineering & Tools

| Siemens NX | CAD | Machine Learning |
| LSTM | Deep Learning |

LANGUAGES

English (Native/Bilingual)
Chinese (Professional Proficiency)

INTERESTS

Solar Electric Vehicles

Member of Illini Solar Car Mechanical Team

"Innovating at the intersection of Materials Science and Computer Science."