

Hongxuan Chen 陈弘轩

hongxuanchen@cuhk.edu.cn | hc10@illinois.edu | hxchen0406@gmail.com
(+86) 18685158432 | (+1) 217-550-1123 | hxchen9.github.io

FACULTY POSITION

Assistant Professor (Teaching), June 2026 - Present

School of Data Science, The Chinese University of Hong Kong (Shenzhen)

OTHER TEACHING EXPERIENCE

Co-Instructor of Record

CS173: Discrete Structures – University of Illinois Urbana-Champaign, Summer 2025

CS233: Computer Architecture – University of Illinois Urbana-Champaign, Spring 2024

EDUCATION

University of Illinois Urbana-Champaign

Ph.D. in Computer Science, May 2026

- Advisor: Geoffrey Herman and Jeff Erickson
- Dissertation title: Investigating Student Difficulties and Evaluating Pedagogical Interventions for Graph Layering in Algorithm Design

University of Illinois Urbana-Champaign

B.S. in Computer Science, *Highest Honors*, May 2021

RESEARCH INTERESTS

My research focuses on computer science education, particularly:

- Understanding and addressing student difficulties with algorithm design and discrete mathematics
- Investigating non-conceptual aspects of CS education, e.g. pedagogies, policies, and curricula

PEER-REVIEWED PUBLICATIONS

- Gertner, Y., Solomon, B., **Chen, H.**, Robson, E., Evans, C., Erickson, J. (2026). Measuring Students' Perceptions of an Autograded Scaffolding Tool for Students Performing at All Levels in an Algorithms Class. In *Proceedings of the 57th ACM Technical Symposium on Computer Science Education V. 1* (pp. 393-399). <https://doi.org/10.1145/3770762.377251>
- Liu, J., Poulsen, S., Goodwin, E., **Chen, H.**, Williams, G., Gertner, Y., & Franklin, D. (2025). Teaching Algorithm Design: A Literature Review. *ACM Transactions on Computing Education*, 25(2), 1-20. <https://doi.org/10.1145/3727987>
- (Poster) **Chen, H.**, Braught, K., Herman, G. L., & Erickson, J. (2025). Novice Difficulties in Graph Layering for Algorithm Design. In *Proceedings of the 56th ACM Technical Symposium on Computer Science Education V. 2* (pp. 1415-1416). <https://doi.org/10.1145/3641555.3705221>
- Poulsen, S., **Chen, H.**, Gertner, Y., Cosman, B., West, M., & Herman, G. L. (2025). Measuring the Impact of Distractors on Student Learning Gains while Using Proof Blocks. In *Proceedings of the 56th ACM Technical Symposium on Computer Science Education V. 1* (pp. 917-923). <https://doi.org/10.1145/3641554.3701787>
- **Chen, H.**, Li, A., Challen, G., & Cunningham, K. (2024). Implementation of Split Deadlines in a Large CS1 Course. In *Proceedings of the 55th ACM Technical Symposium on Computer Science Education V. 1* (pp. 193-199). <https://doi.org/10.1145/3626252.3630873>
- Poulsen, S., Gertner, Y., **Chen, H.**, Cosman, B., West, M., & Herman, G. L. (2024). Disentangling the Learning Gains from Reading a Book Chapter and Completing Proof Blocks Problems. In

- **Chen, H.**, Fong, M. M., Herman, G. L., & Silva, M. (2023). Student Autonomy in Collaborative Learning: Effects of Meeting Time and Team Consistency. In *2023 IEEE Frontiers in Education Conference (FIE)* (pp. 1-9). IEEE. <https://doi.org/10.1109/FIE58773.2023.10343523>
- **Chen, H.**, West, M., Hilgenfeldt, S., & Silva, M. (2023). Measuring the Impact of a Computational Linear Algebra Course on Students' Exam Performance in a Subsequent Numerical Methods Course. In *Proceedings of the 54th ACM Technical Symposium on Computer Science Education V. 1* (pp. 115-121). <https://doi.org/10.1145/3545945.3569778>
- Fong, M. M., Butler, L., **Chen, H.**, & Herman, G. L. (2022). Validating an Observation Protocol for Structured Roles in Cooperative Learning. In *2022 IEEE Frontiers in Education Conference (FIE)* (pp. 1-9). IEEE. <https://doi.org/10.1109/FIE56618.2022.9962529>
- Fong, M., **Chen, H.**, Butler, L., & Herman, G. (2022). Developing an Observation Protocol for Cooperative Learning. In *2022 ASEE Annual Conference & Exposition*. <https://doi.org/10.18260/1-2--40991>
- Mahmood, M. S., **Chen, H.**, Fong, M., & Herman, G. (2022). Work in Progress: Exploring Students' Misconceptions of Cache Memories. In *2022 ASEE Annual Conference & Exposition*. <https://doi.org/10.18260/1-2--40679>

GUEST SPEAKING

- *Implementation of Split Deadlines in a Large CS1 Course*, presented remotely with Geoffrey Challen at the Computing Education Seminar, **UC Davis**, Oct. 2024

SERVICE & OUTREACH

Reviewer

- ACM SIGCSE TS 2023, 2025, 2026
- ACM SIGCSE Virtual 2026
- IEEE FIE 2025

Student Volunteer

- ACM SIGCSE TS 2024, 2025

Teaching Assistant (Girls Who Code, Remote, Summer 2020)

- Assisted instructors during online lectures, grading, and office hours
- Organized advisory panels to encourage female high school students to pursue CS

HONORS AND AWARDS

- **Yee Memorial Fund Fellowship** (\$5,000), Grainger College of Engineering, UIUC, 2025
- **Teacher Ranked as Excellent by Students**, UIUC, Summer 2022, Spring 2024, Summer 2025
- **Outstanding Course Assistant**, CS Department, UIUC (5 recipients selected), Spring 2021
- **Bronze Tablet Honoree**, UIUC (Top 3% of graduating class), Spring 2021
- **Illinois Engineering Achievement Scholarship** (\$1,000), UIUC, Spring 2021