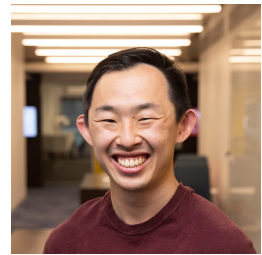


Jonathan Liu

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🌐 <http://liujon23.github.io/>



Education

- 2021 – present ● **Ph.D. Student, University of Chicago** in Computer Science.
Computer Science Education, advised by Dr. Diana Franklin.
- 2016 – 2020 ● **B.A., University of California, Berkeley**
Majors: Computer Science and Mathematics (with Honors).
High Distinction in General Scholarship.

Research Publications

Conference Proceedings

- 1 D. Gonzalez-Maldonado, **J. Liu**, and D. Franklin, “Evaluating gpt for use in k-12 block based cs instruction using a transpiler and prompt engineering,” in *Proceedings of the 56th ACM Technical Symposium on Computer Science Education V. 1*, ser. SIGCSETS 2025, Pittsburgh, PA, USA: Association for Computing Machinery, 2025, pp. 388–394, ISBN: 9798400705311. 🌐 DOI: 10.1145/3641554.3701910.
- 2 **J. Liu**, E. Goodwin, and D. Franklin, “Student utilization of metacognitive strategies in solving dynamic programming problems,” in *Proceedings of the 56th ACM Technical Symposium on Computer Science Education V. 1*, ser. SIGCSETS 2025, Pittsburgh, PA, USA: Association for Computing Machinery, 2025, pp. 687–693, ISBN: 9798400705311. 🌐 DOI: 10.1145/3641554.3701888.
- 3 **J. Liu**, E. Goodwin, D. Saito-Stehberger, S. Jacob, M. Warschauer, and D. Franklin, “Teacher decisions and perspectives in scratch tipp&see implementation,” in *Proceedings of the 56th ACM Technical Symposium on Computer Science Education V. 1*, ser. SIGCSETS 2025, Pittsburgh, PA, USA: Association for Computing Machinery, 2025, pp. 694–700, ISBN: 9798400705311. 🌐 DOI: 10.1145/3641554.3701885.
- 4 R. E. Dougherty, T. Randolph, T.-Y. Chen, *et al.*, “A survey of undergraduate theory of computing curricula,” in *Proceedings of the 2024 on ACM Virtual Global Computing Education Conference V. 2*, ser. SIGCSE Virtual 2024, Virtual Event, NC, USA: Association for Computing Machinery, 2024, pp. 281–282, ISBN: 9798400706042. 🌐 DOI: 10.1145/3649409.3691070.
- 5 **J. Liu** and D. Franklin, “Introduction to quantum computing for everyone: Experience report,” in *Proceedings of the 54th ACM Technical Symposium on Computer Science Education V. 1*, ser. SIGCSE 2023, Toronto ON, Canada: Association for Computing Machinery, Mar. 2023. 🌐 DOI: 10.1145/3545945.3569836.
- 6 J. Tsan, C. Butler, D. Gonzalez-Maldonado, **J. Liu**, C. Thomas, and D. Franklin, “An analysis of gallery walk peer feedback on scratch projects from bilingual/non-bilingual fourth grade students,” in *Proceedings of the 2023 ACM Conference on International Computing Education Research - Volume 1*, ser. ICER '23, Chicago, IL, USA: Association for Computing Machinery, Aug. 2023. 🌐 DOI: 10.1145/3568813.3600137.
- 7 A. Shah, **J. Liu**, K. Stephens-Martinez, and S. H. Rodger, “The cs1 reviewer app: Choose your own adventure or choose for me!” In *Proceedings of the 26th ACM Conference on Innovation and Technology in Computer Science Education V. 1*, ser. ITiCSE '21, Virtual Event, Germany: Association for Computing Machinery, Jun. 2021. 🌐 DOI: 10.1145/3430665.3456333.

C. H. Séquin, W. Brandon, and **J. Liu**, "Modular construction of symmetrical knots," in *Hyperseeing: Proceedings of SMI'2021 Fabrication and Sculpting Event*, ser. SMI'FASE 2019, Vancouver, Canada, Mar. 2019. [URL: https://naka242.github.io/SMIFASE2019/index.html](https://naka242.github.io/SMIFASE2019/index.html).

Teaching Experience

College Courses

- Fall 2023 ● **Games for Learning**, University of Chicago (TA)
- Spring 2023 ● **Theory of Algorithms**, University of Chicago (Head TA)
- Spring 2022 ● **Theory of Algorithms**, University of Chicago (Head TA)
- Summer 2019 ● **Multivariable Calculus**, UC Berkeley (Undergraduate Student Instructor)
- Fall 2018 ● **Calculus 2**, UC Berkeley (Undergraduate Student Instructor)

Other

- 2018 - present ● **Instructor and Moderator**, Art of Problem Solving, Inc.
- 2022 - 2023 ● **Math Tutor**, Wendell Phillips High School

Awards

- 2021-present ● **Liew Family Graduate Fellowship**, University of Chicago
- 2025 ● **Outstanding Reviewer Award**, SIGCSE TS 2025
- 2023 ● **Physical Sciences Teaching Prize**, University of Chicago

Service

- 2025 ● **Hybrid Experience Co-chair**, International Computing Education Research (ICER) 2025
- **Reviewer**, SIGCSE TS 2025 [*Outstanding Reviewer Award*]
- **Panel Moderator**, "Making the Most of your PhD Visit Day," Code to PhD.
- 2024-2025 ● **CCTL Graduate Fellow** Learning with AI in the Liberal Arts (LAILA) Graduate Fellow, Chicago Center for Teaching and Learning (CCTL)
- **Graduate Assistant** Teaching in the Generative AI Landscape, CCTL
- 2024 ● **Hybrid Experience Co-chair**, ICER 2024
- **Reviewer**, ITiCSE 2024
- 2023 ● **Hybrid Experience Co-chair**, ICER 2023
- **Panelist**, "ChatGPT: Friend or Foe? A Discussion for Students," University of Chicago
- 2022 ● **Co-Organizer**, People and Tech Seminar, University of Chicago
- 2018-2020 ● **President**, Undergraduate Group for Theoretical Computer Science (UGTCS), UC Berkeley