RUNLONG "HARRY" YE

Ph.D. Student, Department of Computer Science, University of Toronto
harryye.com ◇ harryye@cs.toronto.edu ◇ linkedin.com/in/runlong-ye

RESEARCH INTERESTS

Human-Computer Interaction, Computing Education, Human-AI Interaction, Information Visualization, Education Technologies

My research studies how interactive AI tools can support cognitive engagement, responsible AI use, reflection, and evidence-centred decision-making for students, educators, and researchers.

EDUCATION

Ph.D. in Computer Science Sep. 2024 – Present
Department of Computer Science, University of Toronto
Advisors: Prof. Michael Liut, Prof. Carolina Nobre
Area: Human-Computer Interaction

B.Sc. in Computer Science Sep. 2019 – Jun. 2024
Department of Computer Science, University of Toronto

RESEARCH & PROFESSIONAL EXPERIENCE

Department of Computer Science, University of Toronto Jan. 2023 – Dec. 2023; Sep. 2024 – Present
Researcher, Dynamic Graphics Project (DGP) *Toronto, ON*

- Ph.D. work: design and evaluate AI-assisted systems for qualitative analysis, literature review, worksheet personalization, and technical writing feedback, leading to publication at premier HCI and CER venues like CHI, IUI, ITiCSE, and AIED [C.6]–[C.13].
- Undergraduate work: contributed to CodeAid, a classroom-deployed LLM programming assistant; analyzed interaction logs, surveys, and interviews from a 700-student course, leading to CHI 2024 [C.4].

Department of Computer Science, University of Toronto Aug. 2020 – Jun. 2024
Undergraduate Researcher, Intelligent Adaptive Interventions Lab *Toronto, ON*

- Designed and evaluated scalable computing education interventions, including reminder emails, reflective learning activities, and student-instructor communication.
- Co-designed randomized deployments across large undergraduate courses and analyzed behavioral, survey, and interview data, leading to SIGITE, Koli Calling, SIGCSE, and DIS publications [C.1]–[C.3], [C.5].

Oracle May 2022 – May 2023
Full-Stack Software Developer Co-op *Toronto, ON*

- Modernized a legacy web application with React and OJET, maintained 20+ projects, and migrated core services to Kubernetes to improve scalability and maintainability.
- Developed 20+ end-to-end and asynchronous API tests using Java, Selenium WebDriver, and C#, improving test coverage and development reliability.

FULL CONFERENCE PAPERS

[C.13] **Ye, R.***, Liu, S.*, Simion, B., Eaton, C., & Liut, M. (2026). A Comparative Study of Technical Writing Feedback Quality: Evaluating LLMs, SLMs, and Humans in Computer Science Topics. In *Proceedings of the International Conference on Artificial Intelligence in Education (AIED '26)*. (15 pages). [16% acceptance rate (full paper)]

[C.12] **Ye, R.***, Ortiz, F.*, & Liut, M. (2026). Beyond One-Size-Fits-All Exercises: Personalizing Computer Science Worksheets with Large Language Models. In *Proceedings of the 31st ACM Conference on Innovation and Technology in Computer Science Education (ITiCSE '26)*. (7 pages). [25% acceptance rate]

[C.11] Sibia, N., Wen, J., Zhang, Z., **Ye, R.**, Jung, J., Musabirov, I., Simion, B., Suárez, C. A., Vrbik, P., Petersen, A., Zavaleta Bernuy, A., & Liut, M. (2026). SQL Beyond Querying: Scaffolded DDL and DML Practice with Immediate Feedback. In *Proceedings of the ACM Conference on Innovation and Technology in Computer Science Education (ITiCSE '26)*. (7 pages). [25% acceptance rate]

[C.10] **Ye, R.**, Huang, O., Lee, P. Y. K., Liut, M., Nobre, C., & Kong, H. K. (2026). Reflexis: Supporting Reflexivity and Rigour in Collaborative Qualitative Analysis through Design for Deliberation. In *Proceedings of the 2026 CHI Conference on Human Factors in Computing Systems (CHI '26)*. (31 pages). [25% acceptance rate]

[C.9] **Ye, R.**, Sibia, N., Zavaleta Bernuy, A., Zhu, T., Nobre, C., Pammer-Schindler, V., & Liut, M. (2026). From Toil to Thought: Designing for Strategic Exploration and Responsible AI in Systematic Literature Reviews. In *Proceedings of the 31st International Conference on Intelligent User Interfaces (IUI '26)*. (22 pages). [20% acceptance rate]

[C.8] Hou, X., Xiao, R., **Ye, R.**, Liut, M., & Stamper, J. (2026). Exploring Student Choice and the Use of Multimodal Generative AI in Programming Learning. In *Proceedings of the 57th ACM Technical Symposium on Computer Science Education (SIGCSE '26)*. (7 pages). [30% acceptance rate]

[C.7] Zhang, Z., Chen, P., Du, F., **Ye, R.**, Huang, O., Liut, M., & Aspuru-Guzik, A. (2025). TreeReader: A Hierarchical Academic Paper Reader Powered by Language Models. In *Proceedings of the 2025 IEEE Symposium on Visual Languages and Human-Centric Computing (VL/HCC '25)*. (21 pages). [37% acceptance rate]

[C.6] **Ye, R.**, Lee, P. Y. K., Varona, M., Huang, O., & Nobre, C. (2025). ScholarMate: A Mixed-Initiative Tool for Qualitative Knowledge Work and Information Sensemaking. In *Proceedings of the 4th Symposium on Human-Computer Interaction for Work (CHIWORK '25)*. (7 pages). [35% acceptance rate]

[C.5] Zavaleta Bernuy, A., Sibia, N., Chen, P., Xu, J. J.-N., Tran, E., **Ye, R.**, Pammer-Schindler, V., Petersen, A., Williams, J. J., & Liut, M. (2024). Does the Medium Matter? A Comparative Analysis of Voice and Text Reflective Learning. In *Proceedings of the 2024 ACM Designing Interactive Systems Conference (DIS '24)*. (17 pages). [24% acceptance rate]

[C.4] Kazemitabaar, M., **Ye, R.**, Wang, X., Henley, A., Denny, P., Craig, M., & Grossman, T. (2024). CodeAid: Evaluating a Classroom Deployment of an LLM-based Programming Assistant that Balances Student and Educator Needs. In *Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems (CHI '24)*. (20 pages). [26% acceptance rate]

[C.3] Zavaleta Bernuy, A., **Ye, R.**, Sibia, N., Nalluri, R., Williams, J. J., Petersen, A., Smith, E., Simion, B., & Liut, M. (2024). Student Interaction with Instructor Emails in Introductory and Upper-Year Computing Courses. In *Proceedings of the 55th ACM Technical Symposium on Computer Science Education (SIGCSE '24)*. (7 pages). [33% acceptance rate]

[C.2] Zavaleta Bernuy, A., **Ye, R.**, Tran, E., Mandal, A., Shaikh, H., Simion, B., Petersen, A., Liut, M., & Williams, J. J. (2023). Do Students Read Instructor Emails? A Case Study of Intervention Email Open Rates. In *Proceedings of the 23rd Koli Calling International Conference on Computing Education Research (Koli Calling '23)*. (12 pages). [23% acceptance rate]

[C.1] **Ye, R.**, Chen, P., Mao, Y., Wang-Lin, A., Shaikh, H., Zavaleta Bernuy, A., & Williams, J. J. (2022). Behavioral Consequences of Reminder Emails on Students' Academic Performance: A Real-world Deployment. In *Proceedings of the 23rd Annual Conference on Information Technology Education (SIGITE '22)*. (7 pages). [48% acceptance rate]
🏆 **Best Paper Award (Top 1 Paper)**

* Equal contribution.

WORKSHOP PAPERS & PREPRINTS

[W.2] **Ye, R.**, Huang, O., He, J., & Liut, M. (2026). Exploring Emerging Norms of AI Attribution and Disclosure in Programming Education. Accepted at *Understanding and Engaging Critical Resistance to AI in Education Workshop (CHI '26 Workshop)*. (8 pages).

[W.1] **Ye, R.**, Zhang, Z., Almazroua, B., & Liut, M. (2025). Beyond Autocomplete: Designing CopilotLens Towards Transparent and Explainable AI Coding Agents. Accepted at *The First Workshop on the Application of LLM Explainability to Reasoning and Planning (COLM '25 Workshop)*. (15 pages).

RESEARCH SYSTEMS & PROTOTYPES

Reflexis CHI 2026 [C.10]
Collaborative qualitative analysis system designed to support reflexivity, rigor, and deliberation in team-based interpretation.

ARC -- Automated Review Companion IUI 2026 [C.9]
AI-assisted literature review system designed to reduce toil while preserving researchers' strategic exploration, control, and responsibility in evidence synthesis.

ScholarMate CHIWORK 2025 [C.6]
Mixed-initiative system for qualitative knowledge work and information sensemaking, designed to help researchers organize, interpret, and reflect on literature and qualitative evidence.

CopilotLens COLM Workshop 2025 [W.1]
Prototype for making AI coding agents more transparent and explainable during programming workflows.

TEACHING EXPERIENCE

University of Toronto Sep. 2021 – Present
Teaching Assistant & Head Teaching Assistant *Toronto, ON*

- **Head Teaching Assistant / Prep Head TA** 2023–Present
  Intro to Computer Programming (CSC108); *Intro to Databases* (CSC343).
  Managed course logistics for offerings with up to 1000+ students and 40 TAs, including scheduling, invigilation, staff support, and grading coordination.
  Developed tutorial content, trained teaching teams, and supported assessment design aligned with course learning goals.
- **Teaching Assistant** 2021–Present
  Intro to Computer Programming (CSC108); *Software Design* (CSC207); *Intro to Databases* (CSC343); *Computing Education* (CSC389).
  Delivered tutorials and facilitated active learning in programming, databases, software design, and empirical computing education research methods.
  Designed CSC389 tutorial materials on empirical research methods, later adopted as standard material for subsequent offerings.

AWARDS, HONORS, & GRANTS

Partnership Grant 2026–2027
Institute for the Study of University Pedagogy, University of Toronto
Evaluating LLM and SLM for Higher-Level Technical Writing Feedback ($2,500).
Co-PIs: Prof. Michael Liut, Prof. Bogdan Simion, Prof. Christopher Eaton, Prof. Andrew Petersen, **Runlong Ye**.

Special Recognition for Outstanding Reviews 2025
ACM Conference on Human Factors in Computing Systems (CHI)

DiDi Graduate Student Award in Computer Science 2024–2025
Institutional; Research; $10,000

University of Toronto Undergraduate Student Research Award 2023
Institutional; Research; $7,500

CRA Outstanding Undergraduate Researcher Awards Honorable Mention 2023
International; Research

Best Paper Award 2022
ACM Conference on Information Technology Education (SIGITE)

PROFESSIONAL SERVICE

Workshop Co-organizer 2026
ACM Conference on Fairness, Accountability, and Transparency (FAccT '26) *Montréal, Canada*

Who Bears the Cost of Honesty? Co-creating the Future of AI Disclosure

Co-organizing a participatory FAccT CRAFT/Workshop session on AI disclosure, designed for collective dialogue on responsibility, transparency, and the social costs of AI disclosure practices.

Session website: facct-ai-disclosure.vercel.app

Conference Reviewer

4× Full Paper, *ACM Symposium on User Interface Software and Technology (UIST)* 2026
1× Full Paper, *ACM Designing Interactive Systems Conference (DIS)* 2026
5× Full Paper; 1× Short Paper, *ACM Human Factors in Computing Systems (CHI)* 2026
1× Short Paper, *ACM Human Factors in Computing Systems (CHI)* 2025
1× Full Paper, *ACM Designing Interactive Systems Conference (DIS)* 2025
1× Workshop Paper, *Conference on Language Modeling (COLM)* 2025

Conference Student Volunteer

ACM Technical Symposium on Computer Science Education (SIGCSE TS) 2023

Community Volunteer

Graduate Application Assistance Program (GAAP) 2025
DCS Academy 2025

MENTORING & ADVISING

University of Toronto Computer Science Undergraduate

- **Zeling (Zoey) Zhang** [W.1] Summer 2025