Aayush Kumar

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 @Aeyush10 in aayush-kumar-prose ⓘD 0009-0001-1048-2352

Education

2020 – 2024 🔖 **B.Tech., IIT Kanpur, India** Computer Science and Engineering.
Cumulative Grade Point Average: *9.81/10*

2023 🔖 **Semester Exchange, EPFL, Switzerland** Computer Science.
Cumulative Grade Point Average: *5.4/6*

Employment History

2024 – Present 🔖 **Research Fellow,** PROSE team, Microsoft, India.

2023 🔖 **Quantitative Research Intern,** Quadeye Securities LLP, India.

Publications

Conference Papers

1. **A. Kumar**, Y. Bajpai, S. Gulwani, G. Soares, and E. Murphy-Hill, "Why AI Agents Still Need You: Findings from Developer-Agent Collaborations in the Wild," in *2025 40th IEEE/ACM International Conference on Automated Software Engineering (ASE)*, 2025, pp. 432–444. 🔗 DOI: 10.1109/ASE63991.2025.00043.

2. J. T. Liang, **A. Kumar**, Y. Bajpai, S. Gulwani, V. Le, C. Parnin, A. Radhakrishna, A. Tiwari, E. Murphy-Hill, and G. Soares, "TableTalk: Scaffolding Spreadsheet Development with a Language Agent," *ACM Trans. Comput.-Hum. Interact.*, Sep. 2025, Just Accepted, ISSN: 1073-0516. 🔗 DOI: 10.1145/3765286.

3. H. Goel, **A. Kumar**, and S. S. Ragavan, "End-User Programming is WEIRD: How, Why and What to Do About It," in *2023 IEEE Symposium on Visual Languages and Human-Centric Computing (VL/HCC)*, 2023, pp. 41–50. 🔗 DOI: 10.1109/VL-HCC57772.2023.00013.

4. M. Amoozadeh, D. Daniels, D. Nam, **A. Kumar**, S. Chen, M. Hilton, S. Srinivasa Ragavan, and M. A. Alipour, "Trust in generative ai among students: An exploratory study," in *Proceedings of the 55th ACM Technical Symposium on Computer Science Education V. 1*, ser. SIGCSE 2024, Portland, OR, USA: Association for Computing Machinery, 2024, pp. 67–73, ISBN: 9798400704239. 🔗 DOI: 10.1145/3626252.3630842.

Pre-prints

1. **A. Kumar**, D. Prol, A. Alipour, and S. S. Ragavan, *To Google or To ChatGPT? A Comparison of CS2 Students' Information Gathering Approaches and Outcomes*, 2025. 🔗 URL: https://arxiv.org/abs/2501.11935.

2. N. Mehrotra, **A. Kumar**, S. Gulwani, A. Radhakrishna, and A. Tiwari, *TEN: Table Explicitization, Neurosymbolically*, 2025. 🔗 URL: https://arxiv.org/abs/2508.09324.

3. **A. Kumar** and S. Mhatre, *UnWEIRDing LLM Entity Recommendations*, 2025. 🔗 URL: https://arxiv.org/abs/2511.18403.

Conference Posters

1. M. Amoozadeh, D. Daniels, S. Chen, D. Nam, **A. Kumar**, M. Hilton, M. A. Alipour, and S. S. Ragavan, "Towards Characterizing Trust in Generative Artificial Intelligence among Students," in *Proceedings of the 2023 ACM Conference on International Computing Education Research - Volume 2*, ser. ICER '23, Chicago, IL, USA: Association for Computing Machinery, 2023, pp. 3–4, ISBN: 9781450399753. 🔗 DOI: 10.1145/3568812.3603469.

[2] H. Goel, **A. Kumar**, and S. S. Ragavan, "Poster: End-User Programming is WEIRD," in *2023 IEEE Symposium on Visual Languages and Human-Centric Computing (VL/HCC)*, 2023, pp. 274–275. 🔗 DOI: `10.1109/VL-HCC57772.2023.00051`.

Awards and Achievements

2025   🔖 **Outstanding Reviewer**, iTiCSE 2025.

2024   🔖 **Research Proficiency Medal**, IIT Kanpur, India.
Awarded for best undergraduate research project by a graduating student in the Computer Science and Engineering department.

2022   🔖 **Academic Excellence Award**, IIT Kanpur, India.

2021   🔖 **Dr. Prateek Mishra Memorial Scholarship Awardee**, IIT Kanpur, India.
Awarded for achieving the highest GPA in my department during freshman year.

       🔖 **Academic Excellence Award**, IIT Kanpur, India.

2020   🔖 **All India Rank 976**, Joint Entrance Examination - Advanced, India.

       🔖 **All India Rank 4128**, Joint Entrance Examination - Mains, India.

Reviewing Experience

2026   🔖 **PC Member, iTiCSE 2026**

2025   🔖 **External Reviewer, TEI 2026**

       🔖 **Sub-Reviewer, ASE 2025**

       🔖 **Reviewer, iTiCSE 2025**

2023   🔖 **Sub-Reviewer, ICSE 2024**

Teaching Experience

2023   🔖 **Tutor, ESC111: Fundamentals of Computing**, CSE Department, IIT Kanpur, India.
Taught a CS1 course to a class of 25-30 students once a week during the Fall 2023 semester.

2022   🔖 **Volunteer**, Prayas (Student-run Community Service Organisation), IIT Kanpur, India.
Taught mathematics to underprivileged children of grade 12 at a student-run non-profit organization

Selected Projects

1.   **Intersectionality in Oversampling on Social Attributes**, Semester Project, ML4ED Lab, EPFL, 2023, Built on the paper by Cock et al. to analyze the impact of intersectionality on different oversampling strategies for a behavioural predictive model in education.

2.   **SoulFull: An AI-Powered Companion App for Binge Eating**, Course Project, EPFL, 2023, Designed a high-fidelity prototype for an app that supports people struggling with binge eating via journalling and AI-powered insights. 🔗 URL: `https://www.figma.com/file/OLqV3BIDvyHij9iheE4esL/`.

3.   **SUTRA Jupyter Implementation**, Summer Project, C3iHub, IIT Kanpur, 2022, Worked on designing a web application for the SUTRA COVID predictive model with Dr. Manindra Agarwal. Helped translate the SUTRA Mathematical Model from Excel to Jupyter code with user inputs and parameters. 🔗 URL: `https://github.com/Aeyush10/SUTRA`.

4.   **DigiCampus**, Course Project, IIT Kanpur, 2022, Worked with a team to create a web application to simplify entry-exit logistics for students and faculty across college campus. 🔗 URL: `https://github.com/Aeyush10/CS253_Project`.