Aakash Gautam

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PROFESSIONAL POSITIONS AND RANKS HELD

Assistant Professor School of Computing and Information, University of Pittsburgh

Assistant Professor Computer Science, San Francisco State University

Software Development Engineer

PayPal

Education

Virginia Tech

Ph.D. in Computer Science

Dissertation: Designing Socio-Technical Systems to Illuminate Possibilities for a Vulnerable Population **Q** SIGCHI Outstanding Dissertation Award in 2022

Motilal Nehru National Institute of Technology

B. Tech in Computer Science and Engineering

PUBLICATIONS

* denotes shared first authorship.

Peer-Reviewed Conference Papers

- Gautam, A., Kulkarni, A., Hug, S., Lehr, J., & Yoon, I. (2024). Socially Responsible Computing in an Introductory Course. In *Proceedings of the 55th ACM Technical Symposium on Computer Science Education (SIGCSE'24)*
- Narins, L., Scott, A. T., Gautam, A., Kulkarni, A., Castanon, M., Kao, B., Ihorn, S., Siu, Y., Mason, J. M., Blum, A. M., Yoon, I. (2023). Validated Image Caption Rating Dataset. In *NeurIPS 2023. Q Spotlight Award*
- Gautam, A., & Tatar, D. (2022). Empowering Participation Within Structures of Dependency. In Proceedings of the 17th Participatory Design Conference (PDC'22)
- Bhatti, N., Mbakwe, A. B., Nnadi, S., Clarke, G. S., McCrickard, D. S., Kelliher, A., & Gautam, A. (2022). Intimate Narratives: An Assets-Based Approach To Develop Holistic Perspectives of Student Mothers' Lives and Their Use of Technology in Parenting. In Proceedings of 26th ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW'22)
- Gautam, A.*, Wong-Villacres, M.*, Tatar, D., & Disalvo, B. (2021). Reflections on Assets-Based Design: A Journey Towards A Collective of Assets-Based Thinkers. In *Proceedings of the ACM on Human-Computer Interaction*, 5 (CSCW2)
- Venkatagiri, S., Gautam, A., & Luther, K. (2021). Crowdsolve: Managing tensions in an expert-led crowdsourced investigation. In *Proceedings of the ACM on Human-Computer Interaction*, 5 (CSCW1)
- Gautam, A., Harrison, S., & Tatar, D. (2020). Crafting, Communality, and Computing: Building on Existing Strengths To Support a Vulnerable Population. In *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems (CHI'20)*

September 2023 – Present Pittsburgh, Pennsylvania

August 2021 – August 2023 San Francisco, California

> June 2013 – June 2015 Bangalore, India

August 2015 – August 2021 Blacksburg, VA

> June 2009 – May 2013 Allahabad, India

- Gautam, A., Wall Bortz, W., & Tatar, D. (2020). Abstraction Through Multiple Representations in an Integrated Computational Thinking Environment. In *Proceedings of the 51st ACM Technical Symposium on Computer Science Education (SIGCSE'20)*
- Wall Bortz, W., Gautam, A., Lipscomb, K., & Tatar, D. (2019). Integrating Computational Thinking into Middle School Science: A Search for Synergistic Pedagogy. In 2019 ASEE Southeastern Section Conference.
 Q Best Paper Award
- Gautam, A., Shrestha, C., Tatar, D., & Harrison, S. (2018). Social Photo-elicitation: The Use of Communal Production of Meaning in a Sensitive Setting. In *Proceedings of 21st ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW'18)* Recognition for Contribution to Diversity and Inclusion
- Gautam, A., Wall Bortz, W., Tatar, D., Lipscomb, K., Rivale, S., Orsino, C. & Etzkorn, F. (2017). Finding Abstraction-Comprehension Balance: A Study of Model-Based Integrated Science and Computational Thinking Application. *American Educational Research Association (AERA'17)*

Journal Articles

- Wall Bortz, W., Gautam, A., Tatar, D., & Lipscomb, K. (2020). Missing in Measurement: Why Identifying Learning in Integrated Domains is so Hard. *Journal of Science Education and Technology* (JOST), 29(1), 121-136.
- Gautam, A., Williams, D., Terry, K., Robinson, K., & Newbill, P. (2018). Mirror Worlds: Examining the Affordances of a Next Generation Immersive Learning Environment. *TechTrends*, 1-7.

Book Chapters

• Wall Bortz, W., Gautam, A., Tatar, D., & Lipscomb, K. (2019). The Availability of Pedagogical Responses and the Integration of Computational Thinking. *Integrating Digital Technology in Education:* School-University-Community Collaboration, 81.

Peer-Reviewed Short Papers

- Han, M. & Gautam, A. (2023). A Case For Supporting Translanguaging in Technology. In Design of Interactive Systems (DIS'23)
- Shrestha, C., Tatar, D., Gautam, A., & Stewart, M. (2022). Reinfrastructuring Classroom Discourse with ThoughtSwap. In *Proceedings of Computer Supported Collaborative Learning (CSCL'22)*
- Gautam, A., Harrison, S., & Tatar, D. (2020). p for political: Participation Without Agency Is Not Enough. In *Proceedings of the 16th Participatory Design Conference (PDC'20)*
- Gautam, A., Shrestha, C., & Tatar, D. (2019). Beyond Saving: A Case for Agency-First Approach Against Domestic Violence. In Proceedings of the Tenth International Conference on Information and Communication Technologies and Development (ICTD'19)
- Gautam, A., Harrison, S., & Tatar, D. (2019). Adding Voices to Support Web Navigation Among a Low Digital Literacy Group. In Companion Publication of the 2019 on Design of Interactive Systems (DIS'19).
- Gautam, A., Shrestha, C., Kulak, A., Harrison, S., & Tatar, D. (2018). Participatory Tensions in Working with a Vulnerable Population. In *Proceedings of the 15th Conference on Participatory Design (PDC'18)*
- Gautam, A., Wall Bortz, W., & Tatar, D. (2017). Case for Integrating Computational Thinking and Science in a Low-Resource Setting. In *Proceedings of the Ninth International Conference on Information* and Communication Technologies and Development (ICTD'17)

• Gautam, A., Vishwasrao, S., & Servant, F. (2017). An empirical study of activity, popularity, size, testing, and stability in continuous integration. In *Proceedings of the 14th International Conference on Mining Software Repositories (MSR'17)*

Workshops (Organized)

- Ko, A. J., Castro, F., **Gautam, A.**, Hu, A. D., Kingsley, S., Lachney, M., Yadav, A. (2024). Computing, Education, and Capitalism. In *Proceedings of the 55th ACM Technical Symposium on Computer Science Education (SIGCSE'24)*
- Karusala, N., Ismail, A., Bhat, K. S., **Gautam, A.**, Pendse, S. R., Kumar, N., ... Wang, D. (2021). The Future of Care Work: Towards a Radical Politics of Care in CSCW Research and Practice. In Companion Publication of the 2021 Conference on Computer Supported Cooperative Work and Social Computing (CSCW'21)
- Gautam, A.*, Wong-Villacres, M.*, Roldan, W., Pei, L., Dickinson, J., Ismail, A., ... Yip, J. (2020). From Needs to Strengths: Operationalizing an Assets-Based Design of Technology. In Companion Publication of the 2020 Conference on Computer-Supported Cooperative Work and Social Computing (CSCW'20)

Demos, Notes, and Posters

- Emejulu, A., Pei, L., **Gautam, A.** (2022). Critical perspectives on ABCD: a conversation with Akwugo Emejulu. Interactions, 29(5), 34-38.
- Wong-Villacres, M., Erete, S., **Gautam, A.**, Ismail, A., Kumar, N., Pei, L., ... Motti, V. G. (2022). Elevating strengths and capacities: the different shades of assets-based design in HCI. Interactions, 29(5), 28-33.
- Gautam, A., & Tatar, D. (2020). Society is the System: Beyond Individual Empowerment to Structural Negotiations. In Computing Professionals for Social Responsibility: The Past, Present and Future Values of Participatory Design
- Gautam, A. (2020). Usable, Acceptable, Appropriable: Towards Practicable Privacy. In CHI 2020 Networked Privacy Workshop
- Gautam, A., Stewart, M., Shrestha, C., Tibau, J, Harrison, S., & Tatar, D. (2019). Designing to Reflect Our Better Nature. In *Design of Interactive Systems (DIS'19)*
- Gautam, A. (2018). Hearing and Crafting: Co-Designing with a Vulnerable Population in Nepal. In *International Research Conference (IRC'18)*
- Stewart, M., Joshi, S., Gautam, A., & Tatar, D. (2017). Thought-swapping for in-class discussions. In *Proceedings of the 9th Annual Conference on Higher Education Pedagogy (CHEP'17)*
- Gautam, A. (2016). Wearing a Granular Production-Focused Lens. In *PSI Workshop: What should come* next for *HCI*?

INVITED TALKS & PRESENTATIONS

• Structures of Injustices. Participatory Design Conference Panel.	08/2022
• Community-Engaged Computing for Social Good. Toyota Research Institute.	05/2022
• Designing Socio-Technical Systems for a Vulnerable Population. CHI Awards.	05/2022
• Rethinking Reintegration. USAID Asia Counter Trafficking In Persons Evidence Summit.	11/2020
• Communication and Communities. HCI4D @ Third Space at University of Toronto	07/2020

• Social Justice. Sustainability, Social Justice and Critical Computing Virtual Forum.	05/2020
• Gender and Design. fempower.tech's CHIversity 2020.	
• Information and Power in Labor Migration. Centre for Social Change, Nepal.	01/2019
Grants	
• Google Award for Inclusion Research: Community-Driven Socio-Technical Approach to Language Preservation and Promotion in Nepal	2022
• Amount: \$60,000.00 (unrestricted gift)	
• Principal Investigator: Aakash Gautam	
• NSF Award # 2216575: Socially Responsible Computing: Promoting Latinx student retention via community engagement in early CS courses	2022
• Amount: \$293,376.00	
• Principal Investigator: Ilmi Yoon	
• Co-Investigators: Aakash Gautam, Anagha Kulkarni	
• Google exploreCSR	202
• Amount: \$38,500.00	
• Principal Investigator: Pooyan Fazli	
• Co-Investigators: Aakash Gautam, Daniel Huang, Hui Yang	
• NSF Award $\#$ 2030581: Scholarships To Improve Undergraduate Students' Academic Achievement Retention, and Career Success in Computer Science and Artificial Intelligence	z, 2022
• Amount: \$999,987.00	
Principal Investigator: Anagha Kulkarni	

- Principal Investigator: Anagha Kulkarni
- Co-Investigators: Aakash Gautam, Ilmi Yoon, Shasta Ihorn

Awards

• Google Award for Inclusion Research Award	2022
• SIGCHI Outstanding Dissertation Award	2022
• Special Recognition for Outstanding Reviews, CHI	2021
• Virginia Tech Graduate School Diversity Scholar	2020
• CS Graduate Teaching Assistant of the Year	2020
• Invited Member of Doctoral Consortium at PDC	2020
• Special Recognition for Outstanding Reviews, CSCW	2019, 2020
• Best Paper Award at ASEE Southeastern Section Conference	2019
• Invited Member of Doctoral Consortium at ICTD	2019
• SIGCHI and ICTD Student Travel Grant	2017, 2019
• Recognition for Contribution to Diversity and Inclusion, CSCW	2018
• Conference Travel Grants from VT CS Department and CHCI	2017, 2018, 2019
• St. Gallen Symposium Leaders of Tomorrow Award	2016