Aakash Gautam

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PROFESSIONAL POSITIONS AND RANKS HELD

Assistant Professor September 2023 – Present School of Computing and Information, University of Pittsburgh Pittsburgh, Pennsylvania

Assistant ProfessorAugust 2021 - August 2023Computer Science, San Francisco State UniversitySan Francisco, California

Software Development Engineer

PayPal

June 2013 – June 2015

Bangalore, India

EDUCATION

Virginia Tech

Ph.D. in Computer Science

August 2015 – August 2021

Blacksburg, VA

Q SIGCHI Outstanding Dissertation Award in 2022

Motilal Nehru National Institute of Technology

B. Tech in Computer Science and Engineering

June 2009 – May 2013 Allahabad, India

PUBLICATIONS

Peer-Reviewed Conference Papers

- 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.
 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)*
- 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)*

^{*} denotes shared first authorship.

- 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.
 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)

- 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.	04/2020
• Information and Power in Labor Migration. Centre for Social Change, Nepal.	01/2019

• Google Award for Inclusion Research: Community-Driven Socio-Technical Approach to Language Preservation and Promotion in Nepal	202
• Amount: \$60,000.00 (unrestricted gift)	
• Principal Investigator: Aakash Gautam	
\bullet NSF Award # 2216575: Socially Responsible Computing: Promoting Latinx student retention via community engagement in early CS courses	202
• 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	
\bullet NSF Award # 2030581: Scholarships To Improve Undergraduate Students' Academic Achievement, Retention, and Career Success in Computer Science and Artificial Intelligence	202
• Amount: \$999,987.00	
Principal Investigator: Anagha Kulkarni	
• Co-Investigators: Aakash Gautam, Ilmi Yoon, Shasta Ihorn	
WARDS	
• Google Award for Inclusion Research Award	202
• SIGCHI Outstanding Dissertation Award	203
• Special Recognition for Outstanding Reviews, CHI	202
• Virginia Tech Graduate School Diversity Scholar	203
• CS Graduate Teaching Assistant of the Year	20
• Invited Member of Doctoral Consortium at PDC	20
• Special Recognition for Outstanding Reviews, CSCW 2019	, 20
• Best Paper Award at ASEE Southeastern Section Conference	20
• Invited Member of Doctoral Consortium at ICTD	20
• SIGCHI and ICTD Student Travel Grant 2017	, 20
• Recognition for Contribution to Diversity and Inclusion, CSCW	20
• Conference Travel Grants from VT CS Department and CHCI 2017, 2018	, 20

2016

• St. Gallen Symposium Leaders of Tomorrow Award

Thesis Supervised

- Jessica Sandejo | Class of 2023 (M.S. in Computer Science at SFSU) | Now at Stanford
- Alekhya Gandu | Class of 2023 (M.S. in Computer Science at SFSU)
- Khusboo Gandhi | Class of 2023 (M.S. in Computer Science at SFSU) | Now at Yahoo
- Michael Han | Class of 2022 (M.S. in Computer Science at SFSU) | Now at Shipt

Mentor: Graduate Students

- Chandani Shrestha | Class of 2022 (Ph.D. in Computer Science at Virginia Tech) | Now at James Madison University
- MD Mazharul Islam | Class of 2019 (M.S. in Computer Science at Virginia Tech) | Now at Intel

Mentor: Undergraduate students

- Ezzat Ezzat | Class of 2024 at San Francisco State University
- Hannah Hum | Class of 2023 at San Francisco State University
- Emma Wang | Class of 2023 at San Francisco State University
- Arianna Yuan | Class of 2023 at San Francisco State University
- April Fitzpatrick | Class of 2019 at Virginia Tech | Now at CapTech Ventures
- Derrick Wang | Class of 2018 at Virginia Tech | Now at University of Waterloo
- Calvin Park | Class of 2018 at Virginia Tech
- Siva Adhitya Gangiredla | Class of 2018 at Virginia Tech | Now at Boeing
- Stephen Bologna-Jill | Class of 2017 at Virginia Tech | Now at United States Marine Corps
- Jue Hou | Class of 2016 at Virginia Tech | Now at LinkedIn

ACADEMIC SERVICE

- Associate Chair (AC): CHI: 2022-2024; CHI Late Breaking Work: 2020 2021
- Paper Reviewer: ICLS: 2022; CSCW: 2017 2022; CHI: 2019 2021; DIS: 2019; ICTD: 2019 2020; AERA: 2017 2018; ASEE: 2019
- Student Volunteer (SV): CSCW: 2016, 2018, 2020; DIS: 2019 (SV Co-Chair); PDC: 2020