

Aakash Gautam

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PROFESSIONAL POSITIONS AND RANKS HELD

Assistant Professor

School of Computing and Information, University of Pittsburgh

September 2023 – Present

Pittsburgh, Pennsylvania

Assistant Professor

Computer Science, San Francisco State University

August 2021 – August 2023

San 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

Motilal Nehru National Institute of Technology

B.Tech in Computer Science and Engineering

June 2009 – May 2013


Allahabad, India

PUBLICATIONS

* denotes shared first authorship.

Peer-Reviewed Conference Papers

- **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)*
- 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)*
 Received 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). Reinfracturing 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 CHIiversity 2020. 04/2020
- 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 2021
 - 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 2021
 - Amount: \$999,987.00
 - 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

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