

Vineet Pandey

Assistant Professor

Kahlert School of Computing, University of Utah

Website: vineetp13.github.io

50 Central Campus Drive,
Salt Lake City, UT 84112 USA
vineet.pandey@utah.edu

Vineet Pandey is an Assistant Professor of Computer Science at the Kahlert School of Computing at the University of Utah. He directs the Designing Collective Intelligence Systems Lab and conducts research on human-computer interaction and social computing.

His primary research interests are in developing **human-centered systems** especially applied to digital health and citizen science. Such tools intervene at individual, social, and institutional levels via, *for instance*, smartphone-based measures of motor and cognitive performance; remote health assessments for neurological disorder communities; and faster decision-making in clinical trials.

Research Interests

Human-computer interaction, Design, Digital Health, Citizen Science

Professional Appointments

University of Utah

Assistant Professor at the Kahlert School of Computing

07/2023-

Faculty Fellow of the One-U Responsible AI Initiative

01/2025-

Shared-faculty appointment at Scientific Computing and Imaging (SCI) Institute

Member of Digital Health Initiative

Massachusetts Institute of Technology

08/2022 – 06/2023

Post-Doctoral Associate at the MIT VIS group at CSAIL

Harvard University

11/2019 – 06/2022

Post-Doctoral Fellow at the Intelligent Interactive Systems Group at SEAS

Affiliate at Center for Research on Computation and Society

Massachusetts General Hospital

11/2019 – 06/2022

Non-Employee Researcher at the Digital Phenotyping Group in Neurology

Microsoft Research

06/2014 – 09/2014

Research Intern at Cipherbase team, Microsoft Research, Redmond

Advanced Technology Group, NetApp

08/2011 – 05/2013

Member of Technical Staff

Education

Post-Doctoral Training

09/2022 – 06/2023

Massachusetts Institute of Technology

Mentor: Arvind Satyanarayan, Associate Professor of Computer Science

Post-Doctoral Training

11/2019 – 06/2022

Harvard University

Mentor: Krzysztof Z. Gajos, Professor of Computer Science

Ph.D. in Computer Science & Engineering

2013 – 2019

University of California San Diego, La Jolla, CA

Thesis: Citizen-led Work using Social Computing and Procedural Guidance

School of Engineering Henry Booker Award for Exemplary Ethical Engineering

Advisor: Scott Klemmer, Professor of Cognitive Science & Computer Science

Committee members: Don Norman, Jim Hollan, Rob Knight, Laurel Riek

Bachelor's Program

2006 – 2011

Bachelor of Engineering (Honors), Computer Science

Birla Institute of Technology & Science (BITS), Pilani, India

HONORS AND AWARDS

- School of Engineering Henry Booker Award for Exemplary Ethical Engineering, UC San Diego, 2019 (Awarded to one student each year across the School of Engineering)
- First Prize in Posters
 - Data Exploration and Learning for Precision Health Intelligence (DELPHI) Symposium, University of Utah. 2025.
 - Women's Health Symposium, University of Utah. 2025.
 - Third Annual Health Data Exploration, UC San Diego. 2017.
- Outstanding Review recognition X 3, ACM CHI 2020, 2021, 2022
- Honorable Mention in Innovation and Teamwork, NetApp CTO Awards. 2012.
- Accepted for Bachelors in Statistics at Indian Statistical Institute, Kolkata. 2006. (30 students nationwide)
- National Talent Search Scholar, 2004. (750 students nationwide)

RESEARCH GRANTS AND CONTRACTS

Merit-Review Based Grants at the University of Utah

For multi-PI grants, my share and the share going to the University of Utah (if different) are given.

Proposals Accepted

Faculty Fellows program at the One-U Responsible AI Initiative. Amount: \$43,000 annually for three years. **PI: Vineet Pandey.** 2025-27

Citizen science platforms for Multiple Sclerosis (MS) community to generate and evaluate hypotheses about the effect of lifestyle choices on the microbiome. Seed grant for Mountain West Microbiota Consortium. **PI: Vineet Pandey, Co-PI: Catherine Lozupone** (Department of Biomedical Informatics, University of Colorado Anschutz Medical Campus) \$ 34,000 (Pandey: \$ 22,100). 2025–2026

Undergraduate research at the University of Utah.

- Undergraduate Research Opportunity Program (UROP), Fall 2025.
- Summer Program for Undergraduate Research (SPUR), 2026. Co-PI: Sara K. Yeo (Communication)

PUBLICATIONS

Underlined Students primarily supervised by me at the University of Utah

Italics Other students at the University of Utah.

◆ Indicates one of the four most important publications.

Number of citations are updated as of January 12, 2026

PEER-REVIEWED JOURNAL PUBLICATIONS

1. Nicole M. Eklund, Jesse Ouilon, **Vineet Pandey**, Christopher D Stephen, Jeremy D Schmahmann, Jeremy Edgerton, Krzysztof Z Gajos, Anoopum S Gupta, *Real-life ankle submovements and computer mouse use reflect patient-reported function in adult ataxias*, Brain Communications, Volume 5 Issue 2, 2023. #Citations = 18, Impact Factor = 3.5
2. **Vineet Pandey**, Nergis C. Khan, Anoopum S Gupta, Krzysztof Z Gajos, *Accuracy and Reliability of At-Home Quantification of Motor Impairments Using a Computer-Based Pointing Task with Children with Ataxia-Telangiectasia*, ACM Transactions on Accessible Computing (TACCESS), 2023. #Citations = 5, Impact Factor = 2.4
3. Nergis C. Khan, **Vineet Pandey**, Anoopum Gupta, Krzysztof Gajos, *Free-living motor activity monitoring in ataxia-telangiectasia*, The Cerebellum Issue#3, 2021 ♦ #Citations = 36, Impact Factor = 3.5
4. Daniel McDonald, Rob Knight, **Vineet Pandey** (member of American Gut Consortium), *American gut: an open platform for citizen science microbiome research*, American Society for Microbiology mSystems, 2018. #Citations = 890, Impact Factor = 6.4
5. Gerth S. Brodal, Mark Greve, **Vineet Pandey**, S. Srinivasa Rao, *Integer Representations towards Efficient Counting in the Bit Probe Model*, Journal of Discrete Algorithms, 2014. #Citations = 12

PAPERS IN RIGOROUSLY REVIEWED CONFERENCES

1. Sujit K. Kamaraj, **Vineet Pandey**. *Investigating the Process-Platform Gap: How a Patient Community's Efforts Teach us About the Limits of Social Platforms in Supporting Institutional Processes*, ACM GROUP, 2027.
2. Nastaran Jadidi, **Vineet Pandey**, *Rhetoric and Linguistic Strategies in an Online Advocacy Movement*, ACM Collective Intelligence, 2025. #Citations = 1
3. Carly Atwell, Nastaran Jadidi, **Vineet Pandey**. *Left to their own devices: How people with ALS use digital platforms as advocacy space* (Extended Abstract), ACM SIGACCESS Conference on Computers and Accessibility (ASSETS), 2025. #Citations = 0
4. **Vineet Pandey**, Tushar Koul, Chen Yang, Mad Price Ball, Bastian Greshake Tzovaras, Daniel McDonald, Rob Knight, Scott Klemmer. *Galileo: Citizen-led Experimentation using a Social Computing System*, ACM SIGCHI Conference on Human Factors in Computing Systems (CHI), 2021. #Citations = 11 ♦
5. **Vineet Pandey**, Justine Debelius, Embriette Hyde, Tomasz Kosciolk, Rob Knight, Scott Klemmer, *Docent: Transforming Personal Intuitions to Scientific Hypotheses through Content Learning and Process Training*, ACM Conference on Learning @ Scale, 2018. #Citations=17
6. **Vineet Pandey**, Amnon Amir, Justine Debelius, Embriette Hyde, Tomasz Kosciolk, Rob Knight, Scott Klemmer, *Gut Instinct: Creating Scientific Theories with Online Learners*, ACM SIGCHI Conference on Human Factors in Computing Systems (CHI), 2017. #Citations=35 ♦
7. Arvind Arasu, Ken Eguro, Raghav Kaushik, Donald Kossmann, Pingfan Meng, **Vineet Pandey**, Ravi R., *Concerto: A High Concurrency Key-Value Store with Integrity*, ACM Special Interest Group on Management of Data, SIGMOD, 2017. #Citations=85
8. Catherine Hicks, **Vineet Pandey**, Ailie Fraser, Scott Klemmer, *Framing Feedback: Choosing Review Environment Features that Support High Quality Peer Assessment*, ACM SIGCHI Conference on Human Factors in Computing Systems (CHI), 2016. #Citations=81.
9. Gerth S. Brodal, Mark Greve, **Vineet Pandey**, S. Srinivasa Rao, *Integer Representations towards Efficient Counting in the Bit Probe Model*, Theory and Applications of Models of Computation, 2011. #Citations= 4

Papers in Preparation/Submission for Rigorously Reviewed Conferences

1. Janet Ikhile, **Vineet Pandey**. *Understanding Specialists' Workflow and Decision-Making for Designing Digital Tools*, ACM Transactions on Computing for Healthcare (Special Issue on Human Centered Computing in Healthcare), 2026 (In submission)
2. Mutaz Alhennawi, Janet Ikhile, **Vineet Pandey**. *Meet Them Where They Are: Needfinding at Professional Conferences*. (In submission)
3. Sujit K Kamaraj, **Vineet Pandey**. *Teaching with Machines: How Instructors Characterize Generative AI's Role in Teaching Design of Interactive Systems*. (In submission)
4. **Vineet Pandey**, Arvind Satyanarayan, Graham M. Jones, *An ecosystem of evidence: How citizen scientists complement, contest, and contextualize institutional science*, (In preparation) ♦
5. Mutaz Alhennawi, Janet Ikhile, **Vineet Pandey**. *Older Adults' Self-Assessment of Cognitive Performance and Barriers to Staying Cognitively Engaged*. (In preparation)
6. Nastaran Jadidi, Megan Genetti, **Vineet Pandey**. *Ways of Knowing when Pregnant: Personal, Embodied, and Technological Information Practices*. (In preparation)
7. Janet Ikhile, Asma Khan, **Vineet Pandey**. *Learning from Specialists' Communication Strategies to Inform the Design of Tools for Clinician–Patient Communication*. (In preparation)
8. Carly Atwell, Nastaran Jadidi, **Vineet Pandey**. *Characterizing digital participation in healthcare regulatory processes by a terminal rare disorder community*. (In preparation)
9. Sujit K Kamaraj, **Vineet Pandey**. *Breaking Down Cognitive Activity during Errors with Fine-Finger Tracking on Touchscreens*. (In preparation)

OTHER PAPERS PUBLISHED OR PRESENTED

1. Mutaz Alhennawi, **Vineet Pandey**. *Challenges in recruiting older adults for user studies*. Workshop on Participant Recruitment in Accessibility Research, ACM SIGACCESS Conference on Computers and Accessibility (ASSETS) 2025, Denver, CO.
2. Janet Ikhile, **Vineet Pandey**. *Supporting Movement Disorders Specialists with Digital Tools that Integrate with their Workflows*. International Congress of Parkinson's Disease and Movement Disorders, 2025, Honolulu, HI.
3. Nastaran Jadidi, **Vineet Pandey**. *Engaging scientific authority for participatory decision-making: How a rare disorder community uses a social platform*. Conference for Advancing Participatory Sciences 2025, Portland, OR.
4. Sujit K Kamaraj, **Vineet Pandey**. *Cognitive Profiles Using Fine-Finger Performance on a Web-Based Task for Touchscreens*. Conference for Advancing Participatory Sciences 2025, Portland, OR.
5. Nastaran Jadidi, **Vineet Pandey**. *A spectrum of stance: How non-expert communities communicate with institutional experts on digital platforms*. Digital Humanities Utah (DHU 8) 2024, Salt Lake City, UT.

One representative artifact from multiple poster presentations at the University

6. Nastaran Jadidi, Carly Atwell, Asma Khan, Sujit K. Kamaraj, **Vineet Pandey**. *One Size Does Not Fit All: Two Approaches to Better Support Women in Understanding and Managing their Health*. Women's Health Symposium 2025, University of Utah, Salt Lake City, UT
First Prize in Posters

7. Nicole M. Eklund, Jessey Ouillon, **Vineet Pandey**, Akansha Pandey, Christopher D. Stephen, Jeremy D. Schmahmann, Krzysztof Z. Gajos, Jeremy Edgerton, Anoopum S. Gupta *Home speech and coordination measurement in spinocerebellar ataxias and multiple system atrophy*, International Congress for Ataxia Research (ICAR), 2022
8. Katherine Burke, Zoe Scheier, Alison Clark, Amrita Iyer, Roland Brown, **Vineet Pandey**, Mackenzie Keegan, Sheena Chew, Krzysztof Gajos, Kathryn Connaghan, Evan Remington, Anoopum Gupta, Stephen Johnson, Kelley Erb, James Berry. *Using Digital Quantitative Monitoring to Quantify Function and Speech in Amyotrophic Lateral Sclerosis (ALS)*, 21st Annual Meeting of the Northeast ALS Consortium (NEALS), MUSCLE & NERVE, Volume 66, 2022.
9. **Vineet Pandey**, Jessey Ouillon, Krzysztof Z. Gajos, Anoopum S. Gupta, *At-home use of a computer-based tool for estimating motor impairment severity*, Annual Health Data Science Symposium (Smartphones, Wearables, and Health), Harvard University, 2021
10. **Vineet Pandey**, Anoopum Gupta, Krzysztof Gajos, *From novices to co-pilots: Fixing the limits on scientific knowledge production by accessing or building expertise*, Workshop on Computing within Limits (LIMITS), 7th International Conference on ICT for Sustainability (ICT4S), 2020
11. Zoe Scheier, Alison P. Clark, Mackenzie Keegan, Kelley Erb, Evan Remington, Sheena Chew, Roland Brown, Jessey Ouillon, **Vineet Pandey**, Krzysztof Z. Gajos, Anoopum S. Gupta, Katherine M. Burke, James D. Berry, *Using Active Digital Phenotyping to Quantify Function and Cognition in Amyotrophic Lateral Sclerosis (ALS)*, 33rd International Symposium on ALS/MND, 2021.
12. **Vineet Pandey**, *Beyond Data Tracking: A Proposal to Design Health Interfaces for Learning and Sharing*, Workshop on Healthy Interfaces (HEALTHI), ACM Conference on Intelligent User Interfaces, 2021.
13. **Vineet Pandey**, Nergis C. Khan, Anoopum S. Gupta, Krzysztof Z. Gajos, *Neurological assessments without clinical supervision for a rare disease*, AMIA Workgroup on Interactive Systems in Health (WISH), 2020.
14. **Vineet Pandey**, *Improving Health Outcomes by Integrating Personal Knowledge, Community, and Data*, Workshop on Body As Starting Point at ACM CHI, 2019.
15. Sam Lau, Tricia Ngoon, **Vineet Pandey**, Scott Klemmer, *Experiment Reconstruction Reduces Fixation on Surface Details of Explanations*, ACM Creativity and Cognition, 2019. #Citations=2
16. **Vineet Pandey**, *Gut Instinct: Creating Scientific Theories with Online Communities*, Doctoral Consortium at ACM CSCW, 2018.
17. Daniel McDonald, Alexander Aksenov, Alexey Melnik, Pieter Dorrestein, Larry Smarr, Rashmi Sinha, **Vineet Pandey**, Scott Klemmer, Rob Knight, *Transitioning the American Gut Project to the Microsetta Initiative*, American Society of Microbiology, 2018
18. **Vineet Pandey**, Scott Klemmer, Amnon Amir, Justine Debelius, Embriette Hyde, Tomasz Kosciolk, Rob Knight, *Integrating Citizen Science with Online Learning to Ask Better Questions*, AAAI Conference on Human Computation and Crowdsourcing (HCOMP), 2016
19. **Vineet Pandey**, Krishnendu Chatterjee, *Game-Theoretic Models Identify Useful Principles for Peer Collaboration in Online Learning Platforms*, ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW), 2016. #Citations=4
20. **Vineet Pandey**, *Education Across Borders: Technology Supported Mentoring and Teambuilding*, ACM CHI Workshop: HCI Across Borders, 2016
21. **Vineet Pandey**, Yasmine Kotturi, C. Kulkarni, M. Bernstein, S. Klemmer, *Connecting Stories and Pedagogy Increases Participant Engagement in Discussions*. ACM Learning@Scale, 2015. #Citations=3
22. SeungBum Jo, **Vineet Pandey**, S. Srinivasa Rao, *Analysis of Tree Indexing Structures for Flash Memory*. Student Symposium, 18th International Conference on High Performance Computing, 2011

Selected Abstracts and Commentaries

1. Yuvraj Malik, **Vineet Pandey**. Modeling Practice Effects in Remote Cognitive Assessments, Utah Conference on Undergraduate Research (UCUR), 2025.
2. Tianyin Xu, **Vineet Pandey**, Scott Klemmer. An HCI View of Configuration Problems, *arXiv*, 2016.
#Citations=18

Thesis Papers

Doctoral Thesis: Citizen-led Work using Social Computing and Procedural Guidance
School of Engineering Henry Booker Award for Exemplary Ethical Engineering, UC San Diego
Publication date: December 2019

Master's Research Exam: Scaling Learner Feedback
Computer Science and Engineering, UC San Diego
Nominated as a model exam paper, Research Exam Committee, UC San Diego
Publication date: March 2016

Bachelor's Thesis: Data Structures for Flash Memory
Mentor: Dr. Srinivasa Rao Satti, School of Computer Science and Engineering, Seoul National University
Publication date: June 2011

INVITED TALKS TO PRESTIGIOUS COLLOQUIA OR SEMINARS

1. **Citizen Science Systems to Deepen Public Contributions in Occupational Health**
Keynote, Rocky Mountain Center for Occupational and Environmental Health (RMCOEH), University of Utah, 2024
2. **Beyond Communication: Social Media for Participatory Knowledge Building in Science and Medicine**
Edna Anderson-Taylor Communication Institute, University of Utah, 2024
3. **Creating Scientific Theories with Online Communities**
Citizen Microbiology: Moving Beyond Crowdsourcing to Active, Participatory Science by the Public, Session at American Society of Microbiology. San Francisco, CA, USA. 2019
4. **Creating Scientific Theories with Online Communities**
Panel on Applying the Wisdom of the University to Societal Issues, Showcase for American Academy of Arts and Sciences. San Diego, CA, 2019
5. **Peer-to-peer Online Systems that Enable People to Evaluate their Ideas**
Innovation Lab Workshop, Harvard Business School, MA, 2018

Invited Talks - Others

I am typically invited to discuss our group's novel ideas and results across complementary domains in academia and industry. Such talks often come with an honorarium.

1. **The Social media Life of Evidence**, Verbal/Visual Evidence workshop
Language and Technology Lab, Massachusetts Institute of Technology, 2023
2. **Social Computing Systems to Deepen Public Contributions to Science**
Academic Job Talk. Kahlert School of Computing, University of Utah; 2022.
3. **Social Computing Systems to Deepen Public Contributions to Science**
Protocol Labs, Virtual. 2022
4. **Advances in Flash Memory**
1st Alumni Research Talks, BITS Pilani, India, 2012

Paper and Poster Talks

1. **Unsupervised use of web-based tool at home predicts Ataxia severity**
Mass General Hospital Ataxia Center Symposium. 2021
2. **Social Computation: Supporting Intellectual Contributions in Online Health Communities**
ACM CSCW Workshop: The Future of Research on Online Health Communities: Discussing Membership, Structure, and Support. 2021.
3. **Galileo: Citizen-led Experimentation using a Social Computing System**
ACM Conference on Human Factors in Computing Systems (CHI). Virtual. 2021
4. **Beyond Data Tracking: A Proposal to Design Health Interfaces for Learning and Sharing**
ACM Intelligent User Interfaces (IUI): Healthy Interfaces (Workshop), Virtual. 2021
5. **Neurological assessments without clinical supervision for a rare disease** (Poster)
AMIA Workgroup on Interactive Systems in Health (WISH). Virtual. 2020
6. **Gut Instinct: Creating Scientific Theories with Online Communities**
Citizen Science Association, Raleigh, NC, USA. 2019
ACM Conference On Computer- Supported Cooperative Work And Social Computing (CSCW), New York City's Hudson River (Jersey City). 2018 (Doctoral Consortium)
ACM Conference on Human Factors in Computing Systems (CHI), Denver, CO, USA. 2017
Third Annual Health Data Exploration. UC San Diego. 2017. (Poster). **First Prize** in Posters
7. **Docent: Transforming Personal Intuitions to Scientific Hypotheses through Content Learning and Process Training**
ACM Learning@Scale, London. 2018
8. **Integrating Citizen Science with Online Learning to Ask Better Questions** (Demo)
AAAI Conference on Human Computation and Crowdsourcing (HCOMP). Austin, TX. 2016
9. **Game-Theoretic Models Identify Useful Principles for Peer Collaboration in Online Learning**
ACM Conference On Computer-Supported Cooperative Work And Social Computing. San Francisco, CA. 2016 (Poster)
10. **Connecting Stories and Pedagogy Increases Participant Engagement in Discussions** (Poster)
ACM Learning@Scale, Vancouver, 2015
Research Expo, UC San Diego, 2016
11. **Analysis of Tree Indexing Structures for Flash Memory** (Poster) Student Research Symposium, 18th International Conference on High Performance Computing (HiPC 2011), Bangalore, India. 2011

Group / Brown bag Talks

1. **Guest Lecture: User Experience and Human-centered computing**
CS4530: Mobile Application Programming. University of Utah. 2024.
2. **Guest Lecture: Human-centered tools and platforms for participatory science and medicine**
COGS10: Cognitive Consequences of Technology. University of California, San Diego. 2024.
3. **Social Computing Systems to Deepen Public Contributions to Science**
IIT Delhi. 2023
4. **Designing systems for crowdsourced science**
Stanford HCI. 2018
5. **Gut Instinct: Creating Scientific Theories with Online Communities**
University of Chicago. 2018
Precision Medicine Initiative, Scripps Research Translational Institute, La Jolla, CA, USA. 2018.
MIT Teaching Systems Lab. 2018
South Asia Initiative, UC San Diego. 2018

6. Guest Lecture: Creating Scientific Theories with Online Communities

CSCI 499: Computing for Social Good. University of Southern California. 2019.

CSCI 490: Computing and Global Change. University of Southern California. 2020.

CS 179: Design of Useful and Usable Interactive Systems. Harvard University. 2020.

COMP.SCI 496: Interactive Systems for Health Behavior Change. Northwestern University. 2020.

Dissertation talks

1. Creating Scientific Theories with Online Learners

Thesis Proposal, Computer Science & Engineering, UC San Diego. 2017

2. Citizen-led Work using Social Computing and Procedural Guidance

Thesis Defense, Computer Science & Engineering, UC San Diego. 2019

3. Scaling Learner Feedback

Research Exam, Computer Science & Engineering, UC San Diego. 2016

DISCLOSURES, PATENTS ISSUED, AND SOFTWARE DISTRIBUTED

1. Controlling Verification of Key-Value Stores, Arvind Arasu, Ken Eguro, Raghav Kaushik, Donald Kossmann, Pingfan Meng, **Vineet Pandey**, Ravi R. (Microsoft Research). 2018. #Citations=29

2. **Vineet Pandey**, Chhavi Sharma, Ranjit Kumar, Kaladhar Voruganti, Parag Deshmukh, Migrating data from legacy storage systems to object storage systems, (NetApp, Inc.). 2014. #Citations=23

MEDIA EXPOSURE

NPR KPBS Midday Edition, 2019

Test Your Assumptions With UC San Diego Citizen Science Online Tool.

TEACHING AND MENTORSHIP

Courses Taught

Instructor

CS 3540 – Designing Human-Centered Systems

Kahlert School of Computing, University of Utah

New large undergraduate course designed for Computer Science and Software Development majors. Introduction to Human-computer interaction with concepts from human cognition and technology design; pragmatics from multiple forms of prototyping, and programming assignments.

Fall 2025 (N=150 students): Course effectiveness = 5.3/6; Instructor effectiveness = 5.48/6

Fall 2024 (N=136 students): Course effectiveness = 5.52/6; Instructor effectiveness = 5.69/6

Fall 2023 (N=107 students): Course effectiveness = 4.55/6; Instructor effectiveness = 4.91/6 (Co-taught with Professor Jason Wiese)

CS 5968, 6968 – Designing Digital Health Systems

Kahlert School of Computing, University of Utah

New interdisciplinary undergraduate + graduate course focused on designing novel digital health tools and platforms for doctors, people with health disorders, caregivers, and clinical researchers.

<https://vineetp13.github.io/DesigningHealth.html>

Spring 2025 (N=14 students) Course effectiveness = 5.63/6; Instructor effectiveness = 5.66/6

CS 5968, 6968 – Designing Citizen Science Systems

Kahlert School of Computing, University of Utah

New interdisciplinary undergraduate + graduate course designed for Computer Science and Data Science students focused on designing novel online/social platforms for deeper, beneficial public participation in science and medicine.

<https://vineetp13.github.io/DesigningScience.html>

Spring 2024: (N=20 students) Course effectiveness = 5.3/6; Instructor effectiveness = 5.55/6

Teaching Assistant

COGS 230 / CSE 216 – Research in Human-Computer Interaction Design

Cognitive Science & Computer Science & Engineering, UC San Diego; Instructor: Scott Klemmer

Graduate level. Supervision of class material and research projects.

Fall 2014: N=31 students

COGS 120 / CSE 170 – Human-Computer Interaction Design

Cognitive Science & Computer Science & Engineering, , UC San Diego; Instructor: Scott Klemmer

Undergraduate level. Supervision of class material and lab assignments (for N=100 students) and guiding quarter-long research projects in design studio (N=30 students)

Winter 2015

DSGN 1 - Introduction to Design

Cognitive Science, UC San Diego; Instructors: Don Norman and Jim Hollan

Undergraduate level. First Design class at UC San Diego. Supervision of class material, assignments, and projects.

Fall 2016: N=42 students

CSE 150 – Introduction to Machine Learning

Computer Science & Engineering, UC San Diego; Instructor: Kamalika Chaudhuri

Undergraduate level. Supervision of class material and problem sets.

Spring 2015: N=70 students

Digital Electronics and Computer Organisation, BITS Pilani, 2010

Professional Assistant (equivalent to Teaching Assistant). Undergraduate level. Supervision of problem sets and examinations.

SHORT COURSES AND WORKSHOPS TAUGHT

Nothing to report

PHD AND MS COMMITTEES CHAIRED

Ph.D. Students - Advising at Utah

Janet Ikhile, 2023-present

Nastaran Jadidi, 2023-present

Mutaz Hennawi, 2024-present

Sujit K. Kamaraj, 2025-present

M.S. Students - Advising at Utah

Sujit K. Kamaraj, MS Project. “*Crossroads: Understanding Cognitive Activity through Fine-Finger Tracking on Touchscreens*”. University of Utah, 2025. First employment: PhD Student, University of Utah (my group).

UNDERGRADUATE RESEARCH AND SPECIAL PROJECTS

BS + MS Students

1. Carly Atwell, Computing, University of Utah, 2025-present
2. Asma Khan, Computer Science, University of Utah, 2025-present

I have worked with each student for at least a summer leading to a full paper submission.

Undergraduate Research Advised

1. Sieun Shin, Independent Research, Psychology, University of Utah, Fall 2025-present
2. Megan Genetti, Independent Research, Computer Engineering, University of Utah, 2025-present
3. Yuvraj Malik, Independent Research, Computer Science, University of Utah, 2024-present
Undergraduate Research Opportunity Program (UROP), Fall 2025
4. Alex Goff, Independent Research, Computer Science, University of Utah, Summer 2025
5. Hannah Larsen, Summer Research, Computer Science, University of Utah, Summer 2025
The Charles Hansen & Terri Case Endowed Scholarship
6. Vivian Zheng, NSF REU, Computer Science, Stony Brook, Summer 2025
7. Brennan Cook, Thesis Research, Data Science, University of Utah, 2024
Undergraduate Thesis: Optimizing Basketball Strategies: An Analysis of the Impact of Play Type Efficiency and Frequency on Scoring Margins in College Basketball
8. Belén Edgar, NSF REU, Computer Science, Northwestern University, Summer 2024
9. Timi Omoteso, NSF REU, Computer Science, Georgia Tech, Summer 2024

I have supervised the BS thesis of one student. I have worked with all others for at least a semester/summer.

High School Students

via Price College High School Summer Research Scholar Program

1. Kevin Siju Eappen, Hillcrest High School, Summer 2025
2. Om Sanghvi, Hillcrest High School, Summer 2025
3. Lincoln Gierisch, Itineris Early College High School, Summer 2024
4. Silas Fay, Academy for Math, Engineering, & Science, Summer 2024
5. Lavanya Mohnani, Hillcrest High School, Spring 2024
First Prize at Computer Science & Applied Computational Methods, University of Utah Science & Engineering Fair (USEF), 2024

I have provided inputs on Lavanya's high school project; the work is entirely hers. I have worked with all others for at least a semester/summer.

MENTORING OF FACULTY AND STUDENTS

Ph.D. Students Advised at Utah

Shreeman Gautam 2025- (Mentor, not advisor) TBD

M.S. Students Advised at Utah

Naman Rastogi	MS CS '25	Independent Research, Informatics support for Type 1 diabetes
Darshan D. Shimpi	MS Drop	Independent Research, Persuasive techniques and evidence in clinical trials
Gunasekhar Athuluri	MS CS '26	Independent Research, Citizen science platforms in microbiome
Asma Khan	CS BS MS '26	Independent Research, Co-ordination and Communication in clinical work
Jenny (Yijun) Zhan	MSD '24	Software Architectures for Patient-Caregiver Co-produced Knowledge

I have worked on at least a semester-long project with each of the MS students listed above.

Other Mentored Students at Utah

Dhruvil Shah, CS MS - Volunteer position

PhD Committees at Utah

Noelle Brown, 2019-2024, Computing, *Ethics in Computing*, Chair: E. Wiese

Maxim Lisnic, 2020-2025, Computing, *Data-driven Misinformation*, Chairs: Kogan, Lex

Caden Hamrick, 2023-2028, *TBD*, Chairs: Jacob George

M.S. Students - Project Committee at Utah

Sujit Kumar Kamaraj, Assessing Cognition with Fine-finger Tracking on Smartphones. MS CS'25 (**Chair**).

Naman Rastogi, MS Project, Platform Migration in Online Communities. MS '25 (Chair: Marina Kogan).

Semil Jain, MS Project, Citizen Climate Science on CloudLab. MS '24 (Chair: Rob Ricci).

Mentored Students at Harvard

Auxiliary Supervisor for Undergraduate Thesis for Aleksandra Koralczyk, Lodz University of Technology, Poland; Visiting Student at Harvard University

Thesis Advisor Committee member for Katharina Kloppenborg, , Center for Research and Interdisciplinarity, Université de Paris (UdP)

Mentored Students at UC San Diego

Sam Lau, Ph.D.'22, Cognitive Science (with T. Ngoon) → Lecturer at UCSD Computer Science/data science

Tushar Koul, M.S. Mentor, UCSD Computer Science → TaskRabbit

DEPARTMENT, COLLEGE AND UNIVERSITY SERVICE

Department and University

Faculty Liaison, Undergraduate Student Advisory Council (UgSAC), 2025-present

Research Opportunities Committee, 2024-present

Teaching area co-ordinator for Human-centered Computing, 2023-present.

Responsibilities include collaboratively scheduling classes each semester; two-year course planning; and teaching efficiency analysis

Panelist, Utah Center for Broadening Participation in Computing (UCBPC), Spring 2025

Graduate Students Admissions Committee, 2022-24

Miscellaneous Departmental Service

1. Host for a Visiting Speaker at Kahlert School of Computing
 - (a) Don Norman (UC San Diego) **Kahlert Distinguished Lecture / Discussion Series**, Spring 2025
 - (b) Brian Smith (Columbia University), Spring 2025
 - (c) Zuzanna Wojcik (UK Research and Innovation (UKRI) Artificial Intelligence (AI) Centre), Summer 2024
2. Judge, KSoC Kahlert Impact Award, Spring 2025
3. Area research talk, Human-centered Computing, Fall 2023

4. Area research talk, Human-centered Computing visit day introduction talk, Spring 2025

PROFESSIONAL EXTERNAL SERVICE

Program Committees

Program Committee responsibilities include managing the peer-review process, including finding reviewers, building consensus, and reviewing multiple papers.

ACM Conference on Human Factors in Computing Systems (Subcommittee: Health), CHI 2026 2025

ACM Collective Intelligence, CI 2025

ACM International Conference on Supporting Group Work, GROUP 2025

Workshop on Computing within Limits, LIMITS 2025 2024

Before Utah

ACM Conference on Human Factors in Computing Systems, CHI 2022 (**Outstanding Review recognition**)
Subcommittee: Learning, Education, and Families

ACM Conference On Computer- Supported Cooperative Work And Social Computing, CSCW 2022

ACM SIGCAS Computing and Sustainable Societies, COMPASS 2022

ACM Conference on Human Factors in Computing Systems, CHI 2021 (**Outstanding Review recognition**)
Subcommittee: Specific Applications Areas

ACM Conference On Computer- Supported Cooperative Work And Social Computing, CSCW 2021

ACM Designing Interactive Systems, DIS 2021

ACM Creativity & Cognition, C&C 2021

ACM Creativity & Cognition, C&C 2019

ACM Learning at Scale, L@S 2019

Workshops, Late-Breaking Work, WiPs

Workshop on Computing within Limits, LIMITS 2023

Workshop on Computing within Limits at ICT4Sustainability, LIMITS 2021

ACM Conference on Human Factors in Computing Systems (*Late-Breaking Work*), CHI 2020

ACM Learning at Scale (*Work in Progress*), L@S 2019, CHI 2020

Reviewing

Reviewer responsibilities include writing full reviews of papers

ACM Transactions on Computing for Healthcare (Special Issue on Human Centered Computing in Healthcare), 2026

ACM Conference on Human Factors in Computing Systems, CHI 2024

American Medical Informatics Association Annual Symposium, AMIA 2021

ACM SIGACCESS Conference on Computers and Accessibility, ASSETS 2021

ACM Conference on Human Factors in Computing Systems, CHI 2020 (**Outstanding Review recognition**)

ACM Conference On Computer- Supported Cooperative Work And Social Computing, CSCW 2020

Symposium of the Workgroup on Interactive Systems in Health, WISH 2020

ACM Designing Interactive Systems, DIS 2019

ACM Designing Interactive Systems, (*Provocations and WiP*) DIS 2019

Citizen Science Association 2019, CitSci 2019

(now Annual Conference of the Association for Advancing Participatory Sciences (AAPS))

ACM Conference On Computer- Supported Cooperative Work And Social Computing, CSCW 2019, 2018

ACM Conference on Human Factors in Computing Systems, CHI 2018, 2017

Grant Review Panels

National Science Foundation. Office of Advanced Cyberinfrastructure Research Experiences for Undergraduates (NSF REU). 2023.

National Science Foundation. Graduate Research Fellowship Program (NSF GRFP). 2024.

Other Roles at Conferences

Session Chair - at ACM Collective Intelligence, 2025

OUTREACH ACTIVITIES

Educational Outreach

Mentor, Engineering Scholars Program, Price College of Engineering. Spring 2025

Speaker, Undergraduate Research Mentor Panel, Office of Undergraduate Research. Spring 2024

Host, Undergraduate Research Tour, Office of Undergraduate Research. Spring 2024

Mentor, Engineering Scholars Program, Price College of Engineering. Spring 2024

Lecturer, Human-centered design, STEM Community Alliance Program (STEMCAP), Spring 2023

Before Utah

Mentor, EECS Graduate Application Assistance Program (EECS GAAP), MIT, 2022.

Speaker, Summer Summit, Student Initiated Access Programs and Services (SIAPS) at UC San Diego. 2017.

Reviewer, Early Research Scholars Program, UC San Diego (ERSP). 2018.

Reviewer, Gandhi Scholarship Selection Committee. San Diego. 2016.

Organizer, Alumni Research Talks, BITS Pilani, India. 2011, 2012, 2013.

Participant, Workshop Uniting the Californias (WUC). 2014.

Organizer, Visit day for HCI students, UC San Diego, 2015-18.

President, Association of Indian Graduate Students, UC San Diego, 2015-2016

Research Outreach

Ataxia-telangiectasia (A-T) Children's Project, 2020

Galileo at the Rally For Science, May 2019

San Diego Fermentation Festival, San Diego, CA. 2019

Citizen Science Expo, San Diego, CA. 2019

Queso Diego, Fermenter's Club (Beer and cheese communities). 2018

Lyme community, Pittsburgh. 2018

MyLymeData, San Ramone, CA. 2018

Nerd Nite, San Diego, CA. 2018

Maker Faire, San Diego, CA. 2017

January 14, 2026