

# Narges Mahyar\*

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\*Nar-Guess Mah-Yaar

**Assistant Professor**

University of Massachusetts Amherst  
College of Information and Computer Sciences

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Citizenship: Iranian-Canadian

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August 2022

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## RESEARCH INTERESTS

Human-Computer Interaction (HCI), Information Visualization, Social Computing, Crowdsourcing, Digital Civics, and Design Thinking.

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## EDUCATION

- 2014      **PhD in Computer Science**, University of Victoria, Victoria, BC.
- 2008      **Master of Information Technology**, University of Malaya, KL, Malaysia.
- 1998      **Bachelor of Electrical Engineering**, Tehran Azad University, Tehran, Iran.

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## ACADEMIC AWARDS & HONORS

- 2022      **Best Paper Award**, EuroVis 2022
- 2022      **Recognition of Service in Appreciation to Contribution to ACM**, Program Co-Chair, Creativity and Cognition 2021 Conference
- 2021      **Honorable Mention Award**, ACM Designing Interactive Systems (*DIS*)
- 2020      **Best Paper Award**, Computer Supported Cooperative Work and Social Computing (*CSCW*)
- 2017      **Outstanding Paper Award**, Council of Educators in Landscape Architecture
- 2016      **Honorable Mention Award**, ACM Interactive Surfaces and Spaces (*ISS*)
- 2016      **Best Poster Honorable Mention**, Graphics Interface (*GI*)
- 2014      **Best Paper Award**, IEEE Visual Analytics Science and Technology (*VAST*)
- 2014      **Best Research Note Honorable Mention**, Graphics, Animation and New Media (*GRAND*)
- 2010      **Best 4 Papers**, IEEE Visual Analytics Science and Technology (*VAST*)

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## RESEARCH POSITIONS

- 2018-present      **Assistant Professor**, University of Massachusetts Amherst, Amherst, MA.
- 2016-2018      **Design Lab Fellow and Postdoctoral Researcher**, UCSD, San Diego, CA.  
Advisor: Steven P. Dow
- 2014-2016      **Postdoctoral Fellow**, University of British Columbia, Vancouver, BC.  
Advisors: Kellogg Booth, Cynthia Girling, and Ronald Kellett
- 2008-2014      **Research Assistant**, University of Victoria, Victoria, BC, Canada.  
Advisor: Melanie Tory
- Summer 2009      **Research Intern**, SAP, Vancouver, BC, Canada,  
Advisor: Michael McAllister
- 2006-2008      **Research Assistant**, University of Malaya, KL, Malaysia.  
Advisor: Wai (Albert) Yeap

## GRANT SUPPORT

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National Science Foundation (NSF), SATC: CORE: Medium: “Principles and Algorithms for Visual Data Exploration Under Differential Privacy”, (Co-PI)

Award Period: 7/1/20 - 6/30/23, Amount: **\$1,191,106**

UMass ADVANCE Collaborative Research Seed Grants, “MAPPING INSTABILITY: The Effects of the Pandemic on the Civic Life of a Small Town.”, (PI)

Award Period: 11/11/20 - 11/11/21, Amount: **\$15,000**

UMass ADVANCE Collaborative Research Seed Grant, “Towards Reducing Social Inequality in Local-level Public Participation by Giving Voice to Marginalized Populations”, (PI)

Award Period: 04/14/21 - 04/14/22, Amount: **\$12,000**

National Science Foundation (NSF), Computing Innovation Fellows 2021,

Award Period: 1/1/2022- 12/31/2022, Amount: **\$241,936.00**

National Science Foundation (NSF), Smart & Connected Communities Planning Grant, “MAPPING INSTABILITY: Building an Intelligent Community Agent Platform for Understanding the Impact of Large-Scale Crisis on Small Town Communities”, (PI)

Award Period: 10/1/2021- 9/30/2022, Amount: **\$ 146,941.00**

## PUBLICATIONS

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*Note: Top-tier venues in human-computer interaction research include the ACM conferences such as CHI, CSCW, and DIS. The premium venue in visualization and visual analytics is IEEE VIS. Highest quality IEEE VIS papers appear in a special issue of IEEE Transactions on Visualization and Computer Graphics (TVCG). ISS is the premier venue for research on the design, development, and use of emerging tabletop, interactive spaces, and multi-surface technologies. Acceptance rates are reported on conference proceedings. Students are typically named first in human-computer interaction research, except in unusual circumstances. Names of students that I advised are in **bold**.*

### Refereed Journal Publications

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[J11] **Abram Handler**, Narges Mahyar and Brendan O'Connor, “ClioQuery: Interactive Query-Oriented Text Analytics for Comprehensive Investigation of Historical News Archives”, Transactions on Interactive Intelligent Systems, 40 pages, 2022, to appear.

[J10] Ali Sarvghad, **Rolando Franqui-Nadal**, Rebecca Reznik-Zellen, **Ria Chawla** and Narges Mahyar, “Scientometric Analysis of Interdisciplinary Collaboration and Gender Trends in 30 Years of IEEE VIS Publications”, IEEE Transactions on Visualization and Computer Graphics (TVCG), 12 pages, 2022, to appear.

[J9] **Brandon Reynante**, Steven P. Dow and Narges Mahyar “A Framework for Open Civic Design: Integrating Public Participation, Crowdsourcing, and Design Thinking”, ACM Digital Government: Research and Practice (DGOV), Volume 2, Issue 4, pp. 1-22, Oct 2021.

[J8] **Alyxander Burns**, Cindy Xiong, Steven Franconeri, Alberto Cairo and Narges Mahyar, “Designing with Pictographs: Envision Topics without Sacrificing Sensemaking”, IEEE Transactions on Visualization and Computer Graphics (TVCG), 13 pages, 2021.

[J7] **Hee-Tae Jung**, Taiwoo Park, Narges Mahyar, Sungji Park, Taekyeong Rye, Yangsoo Kim and Sunghoon Ivan Lee, “Rehabilitation Games in Real-World Clinical Settings: Practices, Challenges, and Opportunities”, *ACM Transactions on Computer-Human Interaction Journal (ACM TOCHI, presented at ACM CHI 2021)*, vol. 27, no.6, pp. 1-43, 2020.

[J6] **Sarmad Mehrbod**, Sheryl Staub-French, Narges Mahyar and Melanie Tory, “Beyond the clash: investigating BIM-based building design coordination issue representation and resolution”, *Journal of Information Technology in Construction (ITcon)* 24.3, pp. 33-57, 2019.

[J5] **Sarmad Mehrbod**, Sheryl Staub-French, Narges Mahyar and Melanie Tory, “Characterizing Interactions with BIM Tools in Building Design Coordination Meetings”, *Journal of Automation in Construction*, vol. 98, pp. 195-213, 2019.

[J4] Girling, Cynthia, Ronald W. Kellett, Kellogg S. Booth, Narges Mahyar, **Kelly J. Burke** and Alix Krahn, “Collaboration Tools to Support Informed Public Engagement”, *Landscape Research Record*, NO. 06, pp. 264-278. 2017. [Outstanding Paper Award, Council of Educators in Landscape Architecture, 2017]

 Outstanding Paper Award

[J3] Ali Sarvghad, Melanie Tory and Narges Mahyar, “Visualizing Dimension Coverage to Support Exploratory Analysis”, *IEEE Transactions on Visualization and Computer Graphics*, 10 pages, vol. 23, no.1, pp.21-30. 2016.

[J2] Narges Mahyar and Melanie Tory, “Supporting Communication and Coordination in Collaborative Sensemaking”, *IEEE Transactions on Visualization and Computer Graphics*, pp. 1633-1642, 2014. [Best Paper Award, VAST 2014].

 Best Paper Award

[J1] Narges Mahyar, Ali Sarvghad and Melanie Tory, “Note Taking in Co-located Collaborative Visual Analytics: Analysis of an Observational Study”, *Information Visualization*, vol. 11, no. 3, pp. 190-204, 2012. [Special Issue on VAST 2010 top 4 papers].

### Refereed Conference Publications

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[C12] Eric P. S. Baumer, **Mahmood Jasim**, Ali Sarvghad and Narges Mahyar, “Of Course it's Political! A Critical Inquiry into Underemphasized Dimensions in Civic Text Visualization”, *EuroVis 2022*, 14 Pages, *to appear*.

 Best Paper Award

[C11] **Mahmood Jasim**, Christopher Collins, Ali Sarvghad and Narges Mahyar, “Supporting Serendipitous Discovery and Balanced Analysis of Online Product Reviews with Interaction-Driven Metrics and Bias-Mitigating Suggestions”, *ACM Conference on Human Factors in Computing (CHI)*, 2022, 31 pages, *to appear*.

[C10] **Mahmood Jasim**, Enamul Hoque, Ali Sarvghad and Narges Mahyar, “CommunityPulse: Facilitating Community Input Analysis by Surfacing Hidden Insights, Reflections, and Priorities”, *ACM Designing Interactive Systems (DIS)*, pp. 846-863, 2021.

 Honorable Mention

[C9] Carolina Aragón, **Mahmood Jasim** and Narges Mahyar, “RisingEMOTIONS: Bridging Art and Technology to Increase Public Engagement with Climate Change”, *ACM Creativity and Cognition*, pp. 1-10, 2021.

[C8] **Mahmood Jasim**, **Pooya Khaloo**, **Somin Wadhwa**, Amy X. Zhang, Ali Sarvghad and Narges Mahyar, “CommunityClick: Capturing and Reporting Community Feedback from Town Halls to Improve Inclusivity”, *The 23rd ACM Conference on Computer-Supported Cooperative Work and Social Computing*, pp. 1-32, 2020.

 Best Paper Award

[C7] Narges Mahyar, **Diana V. Nguyen**, **Maggie Chan**, **Jiayi Zheng** and Steven P. Dow, “The Civic Data Deluge: Understanding the Challenges of Analyzing Large-Scale Community Input”, *ACM Designing Interactive Systems (DIS)*, pp. 1171-1181, 2019.

[C6] Narges Mahyar, **Michael James**, **Michelle Ng**, **Reggie Wu** and Steven P. Dow, “CommunityCrit: Inviting the Public to Improve and Evaluate Urban Design Ideas through Micro-Activities”, *ACM Human Factors in Computing Systems (CHI)*, pp. 1-14, 2018.

[C5] Narges Mahyar, Kelly Burke, **Siyi Meng, Jialiang Xiang**, Kellogg S. Booth, Cynthia Girling and Ronald Kellett, “UD Co-Spaces: A Table-Centered Multi-Display Environment for Public Engagement in Urban Design Charrettes”, *Interactive Surfaces and Spaces (ISS '16)*, ACM, pp. 109-118, 2016.

 **Honorable Mention**

[C4] **Sarmad Mehrbod**, Sheryl Staub-French, Melanie Tory and Narges Mahyar, “A Framework for Classifying BIM Design Coordination Issues”, *Construction Specialty Conference*, June 8-10, pp. 329-429, 2015.

[C3] Narges Mahyar, Ali Sarvghad, Melanie Tory and **Tyler Weeres**, “Observations of Record-Keeping in Co-located Collaborative Analysis”, HCI Mini-Track, HICSS 2013, pp. 460-469, 2013.

[C2] Narges Mahyar, Ali Sarvghad, and Melanie Tory, “A Closer Look at Note Taking in the Co-located Collaborative Visual Analytics Process,” *IEEE Visual Analytics Science and Technology (VAST'10)*, pp. 171-178, 2010.

 **Top 4 Best VAST Papers**

[C1] Wai K. Yeap, Tommi Opas and Narges Mahyar, “On Two Desiderata for Creativity Support Tools”, *Conference on Computational Creativity*, pp. 180-189, 2010.

### **Refereed Workshop Papers**

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[W10] **Alyxander Burns, Thai On, Christiana Lee**, Rachel Shapiro, Cindy Xiong, and Narges Mahyar, “Making the Invisible Visible: Risks and benefits of disclosing metadata in visualization”, In 2021 IEEE VIS Workshop on Visualization for Social Good (*VIS4Good*), pp. 11-15, 2021.

[W9] **Alyxander Burns**, Cindy Xiong, Steven Franconeri, Alberto Cairo and Narges Mahyar, “How to evaluate data visualizations across different levels of understanding”, *BELIV 2020: Proc. of the 8th IEEE Workshop on Evaluation and Beyond-Methodological Approaches for Visualization*, in conjunction with IEEE VIS 2020, pp. 19-28, 2020.

[W8] **Mahmood Jasim**, Amy X. Zhang, Ali Sarvghad and Narges Mahyar. “Inclusivity in Town Halls: Challenges, Paradigm Shift, and Opportunities”, *Civic Technologies Workshop*, in conjunction with CSCW 2020, 5 pages, 2020.

[W7] Narges Mahyar, **Weichen Liu, Dangyi Liu** and Steven P. Dow, Enabling Crowdsourced Visualizations to Support Large-Scale Civic Engagement, *Workshop on Crowd-Civic Systems*, CSCW 2017, 5 pages, 2017.

[W6] Narges Mahyar, Kellogg S. Booth, Cynthia Girling and Ronald Kellett, “Just Scratching the Surface, the Long Road to Effective Cross-Display Interaction”, *Cross-Surface '16 workshop*, in conjunction with ACM ISS'16, 7 pages, 2016.

[W5] Narges Mahyar, Sung-Hee Kim and Bum Chul Kwon, “Towards a Taxonomy for Evaluating User Engagement in Information Visualization“, *Workshop on Personal Visualization: Exploring Everyday Life*, IEEE VIS 2015, 4 pages, 2015.

[W4] Ronald Kellett, Kellogg Booth and Narges Mahyar, “Collaboration Technology for Stakeholder Engagement in Urban Planning”, *Information Technology & City Life Workshop, CSCW 15*, March 14-16, 2 pages, 2015.

[W3] Narges Mahyar, Ali Sarvghad, Melanie Tory and **Tyler Weeres** “CoSpaces: Workspaces to Support Co-located Collaborative Visual Analytics,” *DEXIS 2011*, 4 pages, Nov 2011.

[W2] Narges Mahyar, Ali Sarvghad, and Melanie Tory, “Roles of Notes in Co-located Collaborative Visualization”, *Workshop on Collaborative Visualization on Interactive Surfaces (CoVis 2009)*, 4 pages, Oct. 2009.

[W1] Ali Sarvghad, Narges Mahyar and Melanie Tory, “History Tools for Collaborative Visualization,” *Workshop on Collaborative Visualization on Interactive Surfaces (CoVis 2009)*, 4 pages, Oct. 2009.

### **Refereed Abstract, Poster & Demo Papers**

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[A8] **Andrew Cunningham, Alyxander Burns** and Narges Mahyar, “Looking to the Past to Visualize the Present: Revisiting W.E.B. Du Bois’ Abolitionist Visualizations”, *In Posters of the IEEE Conference on Visualization*, 2 pages, 2020.

[A7] **Mahmood Jasim, Pooya Khaloo, Somin Wadhwa**, Amy X. Zhang, Ali Sarvghad and Narges Mahyar. “CommunityClick: Towards Improving Inclusivity in Town Halls”. In Companion Publication of the 2020 Conference on Computer Supported Cooperative Work and Social Computing (*CSCW’20 Companion*), ACM, pp. 37–41, 2020.

[A6] **Tamanna Motahar, Mahmood Jasim**, Syed Ishtiaque Ahmed and Narges Mahyar, “Exploring How International Graduate Students in the US Seek Support”, *In Proceedings of the Conference on Human Factors in Computing Systems, Extended Abstract*, PP. 1-8, CHI, 2020.

[A5] **Mahmood Jasim**, Ali Sarvghad, Enamul Hoque and Narges Mahyar, “Towards Understanding Desiderata for Large-Scale Civic Input Analysis”, *In Proceedings of the 2020 Conference on Human Factors in Computing Systems, Extended Abstract*, pp.1-8, CHI, 2020.

[A4] Cynthia Girling, Kellogg S. Booth, Narges Mahyar, Ronald Kellett and **Kelly Burke**, “Fast and Early Feedback: Collaboration Tools to Support Informed Public Engagement”, *Council of Educators in Landscape Architecture Conference*, abstract, 4 pages, May 2017.

[A3] Narges Mahyar, **Weichen Liu**, Sijia Xiao, Jacob T. Browne, Ming Yang and Steven P. Dow, “ConsensusUs: Visualizing Points of Disagreement for Multi-Criteria Collaborative Decision Making”, *CSCW 2017*, demonstration, 4 pages, 2017.

[A2] Narges Mahyar, **Siyi Meng, Jialiang Xiang**, Kellogg S. Booth, Cynthia Girling and Ronald Kellett, “A Multi-Display Environment for Community Planning”, *Graphics Interface*, 2 pages, Poster, 2016.

 **Honorable Mention**

[A1] Narges Mahyar and Melanie Tory, “CLIP: A Visual Thinking Space to Support Collaborative Sensemaking and Reasoning”, *Graphics, Animation and New Media (GRAND) NCE AGM*, 4 pages research note, 2014.

 **Honorable Mention**

### **Other Publications: Magazines, Commentary Papers & Doctoral Symposium**

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[OP4] Iman Deznabi, **Tamanna Motahar**, Ali Sarvghad, Madelina Fiterau and Narges Mahyar, “Impact of the COVID-19 Pandemic on the Academic Community: Results from a survey conducted at University of Massachusetts Amherst”, *ACM Digital Government: Research and Practice 2.2*, pp. 1-12, 2021.

[OP3] Narges Mahyar, **Mahmood Jasim** and Ali Sarvghad, “Designing Technology for Sociotechnical Problems: Challenges & Considerations”, *IEEE Computer Graphics and Applications*, (Volume: 40, Issue: 6), pp. 76-87, 2020.

**[Invited Article]**

[OP2] Michael Sedlmair, Petra Isenberg, Tobias Isenberg, Narges Mahyar and Heidi Lam, Proceedings of the Sixth Workshop on "Beyond Time and Errors: Novel Evaluation Methods for Visualization" (BELIV 2016, October 24, Baltimore, Maryland, USA), October 2016.

[OP1] Narges Mahyar, "Supporting Note Taking in Co-located Collaborative Visual Analytics on Large Interactive Surfaces", Part of the Doctoral Colloquium, *ITS 11 ACM International Conference on Interactive Tabletops and Surfaces*, 4 pages, Nov 2011.

### **Dissertations & Theses**

[DT2] Narges Mahyar, Supporting Sensemaking during Collocated Collaborative Visual Analytics. Ph.D. Dissertation. University of Victoria, 2014.

[DT1] Narges Mahyar, Implementation of Creative-Pad: A New Creativity Support System. MSC Thesis. University of Malaya, 2008.

### **INVITED TALKS/PANELS**

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- 2022 **Tableau Research**, "Social Computing and Visualization Tools for Empowering the Public", August 4, 2022
- 2022 **Engineers and Scientists Acting Locally (ESAL)**, Panel on "Connecting Science and Art for Effective Community Engagement", Invited panelist, May 19, 2022
- 2022 **Northwestern University**, Technology & Social Behavior (TSB) Speaker Series. "Social Computing and Visualization Tools for Empowering the Public", April 21, 2022
- 2022 **Tufts University**, Computer Science Colloquium Series. "Social Computing and Visualization Tools for Empowering the Public", April 7, 2022
- 2021 **UCLAB Potsdam**, Information + Visualization Public Talk Series. "Building Equitable Social Computing and Visualization Tools for Democratizing Public Participation", Nov 23, 2021
- 2021 **Institute of Diversity Sciences**, UMass Amherst "Towards Reducing Social Inequality in Local-level Public Participation by Giving Voice to Marginalized Populations", Nov 23, 2021
- 2021 **University of Colorado Boulder**, ATLAS Colloquium Series. "Building Equitable Social Computing and Visualization Tools for Democratizing Public Participation", April 27, 2021
- 2020 **UMass Amherst**, CICS Community Discussion on Antiracism. "Looking to the Past to Visualize the Present: Revisiting W.E.B. Du Bois' Abolitionist Visualizations", Oct 2020
- 2019 **University of Toronto**, Department of Computer Science. "Social Computing and Visualization for Democratizing Public Participation", November 26, 2019
- 2019 **Ontario Tech University**, Department of Computer Science. "Social Computing and Visualization for Democratizing Public Participation", November 25, 2019
- 2019 **Erv Zube Lecture Series 2019**, Landscape Architecture and Regional Planning, UMass Amherst, "Community-Centered Urban Design at Scale", September 3, 2019

- 2019 **Outstanding Achievement & Advocacy Awards Banquet**, UMass Amherst  
“Social Computing and Visualization to Increase Participation and Collective Innovation”, April 5, 2019
- 2019 **Data Science Research Symposium**, UMass Amherst  
“Social Computing and Visualization to Increase Participation and Collective Innovation”, April 04, 2019
- 2019 **CS Women Lunch Series**, UMass Amherst  
“Social Computing to Enhance Public Engagement in Urban Design at Scale”, Feb 20 2019
- 2019 **WPI**, Computer Science Colloquium.  
“Social Computing to Enhance Public Engagement in Urban Design at Scale”, Jan 11 2019
- 2018 **UMass Amherst**, College of Information and Computer Science.  
“Social Computing to Enhance Public Engagement in Urban Design at Scale”, March 28, 2018
- 2018 **New Jersey Institute of Technology**, Department of Computer Science. “Social Computing to Enhance Public Engagement in Urban Design at Scale”, Feb 20, 2019
- 2018 **Virginia Tech**, Department of Computer Science.  
“Social Computing to Enhance Public Engagement in Urban Design at Scale”, Feb 12, 2019
- 2018 **San Jose State University**, Department of Computer Science.  
“Social Computing to Enhance Public Engagement in Urban Design at Scale”, Feb 6, 2019
- 2018 **Innovations in Participatory Democracy Conference 2018**, Phoenix, AZ.  
“Social Computing to Improve Public Engagement in Urban Planning”, March 8, 2019
- 2018 **University of Illinois at Chicago**, Department of Computer Science. Social  
“Computing to Enrich and Scale Public Engagement” , Feb 1, 2019
- 2017 **Changemakers Day**, UC San Diego, CA.  
“Technologies for Increasing Public Engagement in Civic Issues”
- 2017 **Collaboratory for Downtown Innovation (CDI)**, San Diego, CA.  
“Collective Innovation for Business and Civics”
- 2016 **Autodesk Research**, Toronto, ON.  
“Designing Collaborative Visual Analytics Tools: From Supporting Experts to Engaging the Public”
- 2016 **York University**, Toronto, ON.  
“Designing Collaborative Visual Analytics Tools: From Supporting Experts to Engaging the Public”
- 2016 **Simon Fraser University**, SIAT, Vancouver. BC.  
“Large Interactive Surfaces for Collaboratively Exploring and Driving Meaning from Complex Data”

- 2016 **Microsoft Research**, Redmond, WA.  
“Designing Collaborative Visual Analytics Tools: From Supporting Experts to Engaging the Public”
- 2016 **University Washington Bothell**, Bothell, WA.  
“From Desktops to Tabletops: Opportunities and Challenges”
- 2016 **Boston University**, Boston, MA.  
“Technology for Design: A Road Map”
- 2014 **University of British Columbia**, Vancouver, BC.  
“Supporting Team Communication and Coordination in Visual Analytics”

## TEACHING EXPERIENCE

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### Instructor

- Spring 2022 **Advanced Methods in HCI** (COMPSCI 690A), UMass Amherst.
- Spring 2021 **Advanced Methods in HCI** (COMPSCI 690A), UMass Amherst.
- Fall 2020 **Introduction to HCI** (COMPSCI 325), UMass Amherst.
- Spring 2020 **Computing for the Common Good** (COMPSCI 692M), UMass Amherst.
- Fall 2019 **Introduction to HCI** (COMPSCI 325), UMass Amherst.
- Spring 2019 **Advanced Methods in HCI** (COMPSCI 690A), UMass Amherst.
- Fall 2018 **Digital Civics** (COMPSCI 592C), UMass Amherst.

### Co-Instructor & Guest Lecturer

- Fall 2017 **Civic Design** (Cogs 160), “Co-Instructor with Prof. Steven Dow”, UCSD.
- Spring 2016 **Graduate Research Colloquium** (*IAT 805*), Guest Lecture, School of Arts and Interactive Technology, Simon Fraser University.
- Summer 2014 **Human-Computer Interaction** (*SENG 310*), Guest Lecture, UVic.
- Spring 2014 **Advanced Methods for Human-Computer Interaction**, Guest Lecture, UVic.
- Summer 2013 **Human-Computer Interaction** (*SENG 310*), Guest Lecture, UVic.
- Fall 2008 **Object-Oriented Software Development** (*SENG 330*), Guest Lecture, UVic.

## PROFESSIONAL ACTIVITIES

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### Organizing Committee Member

- 2022 Organizing Committee, Visualization for Social Good Workshop (*Vis4Good*) 2022, in conjunction with IEEE VIS 2022
- 2021 Paper Co-Chair, ACM Creativity and Cognition Conference (*C&C*)
- 2021 Organizing Committee, Chart Question Answering Workshop at CVPR 2021
- 2019 Fast Forward Co-Chair, IEEE VIS 2019
- 2018 Organizing Committee, DTSHPS 2018 (Designing Technologies to Support Human Problem Solving), in conjunction with VL/HCC 2018
- 2016 Organizing Committee, BELIV (*Beyond Time and Errors: Novel Evaluation Methods for Visualization*) 2016, in conjunction with IEEE VIS 2016
- 2009 Organizing Committee, one day workshop at SAP to collectively brainstorm design ideas for a collaborative visual analytics tool (**CoSpaces**) with a large group of designers, developers and project managers.



## Grant Panelist

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2019 National Science Foundation (NSF)

## Program Committee Member

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2022 IEEE VIS 2022

2021 CHI 2022, AC Member (Visualization)

2020 CHI 2020, AC Member (Understanding People)

2019 IEEE VIS 2019, Short Papers

2018 CHI 2018 Late Breaking Work (*LBW*) 2018

2018 & 2019 ACM Creativity and Cognition Conference (*CC*)

2018 BELIV (*Beyond Time and Errors: Novel Evaluation Methods for Visualization*), in conjunction with IEEE VIS 2018

2016 Interactive Surfaces and Spaces (*ISS*), 2016

2016 Graphics Interface (*GI*), 2016

2015 DEXIS 2015, Workshop on Data Exploration for Interactive Surfaces, in conjunction with Interactive Tabletops and Surfaces (*ITS*), 2015

2015-2016 Steering Committee, HCI@UBC, Monthly Seminar Series, UBC

## Referee & Reviewer

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2014-2020 IEEE Visual Analytics Science and Technology (*VAST*)

2015-2021 ACM Human Factors in Computing Systems (*CHI*)

2016-2018, 2020 Computer-Supported Cooperative Work and Social Computing (*CSCW*)

2017 Human Computer Interaction Journal

2014-2019 IEEE Computer Graphics and Applications Journal

2018 Interactive Surfaces and Spaces (*ISS*)

2017 Graphics Interface (*GI*)

2015 Visualization Viewpoint

2015-2019 IEEE Information Visualization Journal (*InfoVis*)

2015 EuroVis (*Eurographics/ IEEE VGTC Symposium on Visualization*)

2014 Graphics, Animation and New Media (*GRAND*)

## Internal Service

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2021-2022 Graduate Student Program Committee Member

2021-2022 Faculty & Staff Award Committee Member

2020-2021 ADVANCED Faculty Fellow

2018 & 2019 Informatics Faculty Recruiting Search Committee Member

2019-2020 Executive Committee Member

2018-2019 PhD Admission Committee Member

## SUPERVISION & MENTORSHIP

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**Note:** I have created a “*mentoring program*” to actively involve undergraduate and underrepresented minority students in research. To date, I have mentored 27 (15 female) undergraduate students as part of my mentoring program. Many of them co-authored publications at top HCI and visualization venues with myself and my Ph.D. students (please see the citations next to each students’ name. Details about this program can be found in my teaching and mentoring statement).

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**Postdoctoral Supervision, UMass Amherst**

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Swapna Joshi, NSF CI Fellow, May 2022-May 2024.  
Zhiqiu Jiang, Fall 2021-August 2022.

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**Ph.D. Student Supervision, UMass Amherst**

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Mahmood Jasim, Computer Science, Fall 2018-present.  
Alyx Burns, Computer Science, Fall 2019-present.  
Mashrur Rashik, Computer Science, Fall 2021-present.  
Tamanna Motahar, Fall 2019- Fall 2020.  
Pooya Khaloo, Computer Science, Fall 2018-Fall 2019.

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**Ph.D. Thesis Committees, UMass Amherst**

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Abe Handler, PhD, Computer Science, Committee, 2021.  
Hee-Tae Jung, PhD, Computer Science, Committee, 2019.

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**Undergraduate Supervision and Honors Thesis, UMass Amherst**

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Nikhil Rajkumar, Spring 2022-present  
Emily Chen, Bachelor of Arts in User Experience Design, Spring 2022-present  
Abigail Elliott, Honors Thesis Advisor, Summer 2021-Summer 2022.  
Tiffany Wang, Summer 2021-Summer 2022.  
Yasmeen Mekky, Summer 2021-Summer 2022.  
Preston Yee, Honors Thesis Advisor, Fall 2020-present.  
Thai On, Honors Thesis Advisor, Fall 2020-present, [W10].  
Rolando Franqui Nadal, Fall 2020-Fall 2021, [J10].  
Ria Chawla, Fall 2020, present, [J10].  
Christiana Lee, Bachelor of Arts in User Experience Design, Fall 2020- present, [W10].  
Andrew Cunningham, Summer 2020, [A8].  
Lucy Cousins, Spring 2020, [JC18].  
Matt Rossman, Honors Thesis Advisor, 2020.  
Emily Goroza, Honors Thesis Committee.  
Anjali Devakumar, Honors Thesis Committee, 2019.  
Arushi Ahmed, Summer 2019.

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**Graduate Research Assistant Supervision, UMass Amherst**

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Lucy Cousins, MS Student in GIS, Spring 2020-Spring 2021.  
Julian Killingback, MSc. Computer Science, Fall 2020-Summer 2020.  
Somin Wadhwa, MSc. Computer Science [C8].  
Yueying Liu, Fall 2020.

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**Synthesis Project Supervision, UMass Amherst**

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Tu Vu, and Youngwoo Kim's, 2019.

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**Student Supervision, Prior to UMass**

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Nancy Zheng, BSc., Cognitive Science, UCSD, Summer 17-Spring 18, [C7].  
Diana Nguyen, BSc. Cognitive Science, UCSD, Winter18-Spring 18, [C7].  
Maggie Chan, BSc. Cognitive Science, UCSD, Winter 18-Spring 18, [C7].  
Reggie Wu, BSc. Cognitive Science, UCSD, Summer 2017, [C6].  
Michelle Ng, BSc., Visual and Environmental Studies and Computer Science, Harvard University, Summer 2017, [C6].  
Michael James, Human-Computer Interaction, Drama, Media, and Design, Carnegie Melon University, Summer 2017, [C6].  
Weichen Liu, MSc. Computer Science, UCSD, Fall 2016-June 2017, [W7].

Lauren Liu, BSc., Computer Science, UCSD, Fall 2016-June 2017.  
 Joanne Cho, BSc., Cognitive Science, UCSD, Fall 2016-June 2017.  
 Sanika Moharana, BSc., Cognitive Science, UCSD, Winter 2016-Summer 2017  
 Alejandro Panduro, BSc., Cognitive Science, UCSD, Fall 2016-Summer 2017.  
 Eric Richards, BSc., Cognitive Science, UCSD, Fall 2016-June 2017.  
 Yabo Shi, BSc. Cognitive Science, UCSD, Winter 2018-Spring 2018.  
 Andres Baez, BSc. Cognitive Science, UCSD, Fall 2017-Spring 2018.  
 Dangyi Liu, MSc. Computer Science, UCSD, Fall 2016-June 2017, [W7].  
 Sarmad Mehrbod, PhD, Civil Engineering, UBC, 2014-2016, [C4, J5, J6].  
 Kelly J. Burke, PhD, iSchool, UBC, Summer 2016, [J4, C5, A4].  
 Siyi (Cathy) Meng, BSc. Computer Science, UBC, Summer 2015, [C5, A2]  
 Jialiang Xiang, BSc. Computer Science, UBC, Summer 2015, [C5, A2].  
 Tyler Weeres, BSc. Computer Science, UVic, Summer 2010, [C3, W3].

## **INDUSTRY EXPERIENCE**

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- 2004 - 2005 **Leader of the E-banking Team, Leader of E-payment Research Group**, Iran Telecommunication Company (ITC), Tehran, Iran. Researched and proposed solutions to implement e-payment services over the national network.
- 2003 - 2004 **IT Expert, Member of IT Services Research Group**, ITC, Tehran, Iran. Researched technologies to transmit video using ITC infrastructure. Contributed to successful implementation of a Video on Demand service.
- 2002 - 2003 **Network Management Analyst**, ITC, Tehran, Iran. Researched hardware/software solutions to improve network performance.
- 2000 - 2002 **Network Infrastructure Designer**, Member of Network Research Group, ITC, Tehran, Iran. Redesigned network hardware and software for all of Iran's major provinces to support increased network traffic (from 250,000 to 43 million users).

## **COMMUNITY INVOLVEMENT**

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- 2015-2016 **Member of Women in Computer Science (FOWCS)**, University of British Columbia, BC, Canada. Developed HCI related curriculum for grade 10-12.
- Summer 2015 **Volunteer**, University of British Columbia, BC, Canada. Helped out Computer Science Department with Girls Learning Code (9-13 years) to host two summer camps. Coordinated and demoed our application 4 times during June and August.
- 2008-2014 **Volunteer**, University of Victoria, Victoria, BC, Canada. Organized many events including department of computer science first Big Data Pechakucha (IdeaFest 2013), and winter social events.
- 2008-2011 **Teacher and Member of the Executive Committee of Internet Course for Seniors**, University of Victoria, Computer Science Volunteer Program. Taught basic skills for navigating the Internet and using email.
- 2008-2011 **Member of Women in Engineering and Computer Science**, UVic.

## **FINE ARTS BACKGROUND & EDUCATION**

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- 2000-2004 Studied Modern Art Principles, Techniques and History, Gholamhossein Nami's Art Academy, Tehran, Iran.
- 1998-2000 Studied Modern Art Principles and Techniques, Mahmood Samandaryan's Art Academy, Tehran, Iran.

1994-1998 Studied Watercolor Painting, Atashzad Academy of Art, Mohammad Reza Atashzad, Tehran, Iran.

1991-1994 Studied Drawing and Painting Principles, Mojgan Mousapour, Isfahan, Iran.

### **FINE ARTS EXHIBITIONS**

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2010 Group exhibition in Cost Collective Gallery (Abstraction), Victoria, Canada.

2005 Individual exhibition in Museum of Contemporary Art of Isfahan, Iran.

2004 Group exhibition in Atashzad Art Gallery, Tehran, Iran.

2004 Group exhibition in University of 'Sanate Ab va Bargh' Tehran, Iran.

2003 Group exhibition in Atashzad Art Gallery, Tehran, Iran.

2002 Group exhibition in Atashzad Art Gallery, Tehran, Iran.

2002 Individual exhibition in Daryabeygi Gallery, Tehran, Iran.

2001 Group exhibition in Haft Peykar Gallery, Tehran, Iran.

2000 Group exhibition in Kosar Gallery, Isfahan, Iran.

1996 Group exhibition, engineering students, Tehran, Iran.

### **AWARDS & RECOGNITIONS**

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2010 Engineering Got Talent (for the Abstract Fine Art Exhibition), University of Victoria, Victoria, Canada

1996 Second position in the National Competition of Calligraphy, Engineering Students of Iran

1995 Third position in the National Competition of Calligraphy, Engineering Students of Iran.