Khairi Reda

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EDUCATION

University of Illinois at Chicago	Ph.D., Computer Science	2014
University of Illinois at Chicago	M.S., Computer Science	2009
University of Damascus, Syria	B.S., Computer Science	2005

APPOINTMENTS

University of Illinois Chicago	Associate Professor	2025 – present
Indiana University Indianapolis	Associate Professor	2022 – 2025
Argonne National Laboratory	Guest Faculty	2024 – 2025
Indiana University Indianapolis	Assistant Professor	2016 – 2022
Argonne National Laboratory	Argonne Scholar	2014 – 2016
University of Hawaii at Manoa	Postdoctoral Fellow	2014 – 2015

PROFESSIONAL ORGANIZATION MEMBERSHIPS

Association for Computer Machinery (ACM), lifetime member	Since 2014
Special Interest Group on Computer-Human Interaction (SIGCHI), member	Since 2014
IEEE Visualization and Graphics Technical Committee (VGTC), member	Since 2015

PROFESSIONAL HONORS AND AWARDS

Research Frontiers Trailblazer	Indiana University	2023
Honorable Mention (top 5% of papers)	ACM CHI conference	2023
Research Excellence Award	Luddy School of Informatics & Computing, IUI	2021
Best Paper (from 173 submissions)	IEEE/EG EuroVis conference	2021
NSF CAREER	National Science Foundation	2020
Excellent Reviewing (service award)	ACM CHI conference	2023, 2022, 2020 x2, 2017

Robert G. Sachs Award	Argonne National Laboratory	2015
Best Poster Honorable Mention	IEEE Information Visualization conference	2015
Argonne Scholar	Argonne National Laboratory	2014-2016
Best Poster Award	IEEE Symposium on Large-Scale Data Analysis and Visualization	2014

RESEARCH GRANTS

Project title	Agency	Role	Amount	Duration
R61/R33: Fatal Overdose Review Teams – Research to Enhance Surveillance Systems	NIH	MPI (with Aalsma & Ray)	$5,134,029	2022 – 2027
CAREER: Towards Trustworthy Analytics	NSF	PI	$538,140	2020 – 2025
Empirically Driven Models for the Visual Analysis of Scientific Data	DOE / Argonne National Lab	PI	$106,796	2023 – 2024
Improving Color Encodings in Scientific Visualizations	DOE / Argonne National Lab	PI	$51,663	2020 – 2022
CRII: CHS: Concept-Driven Visual Analysis	NSF	PI	$174,977	2018 – 2021
REU Supplement (to Concept-Driven Visual Analysis)	NSF	PI	$16,000	2018 – 2021
Visual Analysis of Community Health Concerns	Polis Center	PI	$5,000	2018 – 2019

PUBLICATIONS

Peer-Reviewed Papers (conference, journal, and workshop papers):

+ indicates student advisee.

Lu, K., Zhu, L., Wang, Y., Zeng, Q., Song, W., **Reda, K.** Color-Name Aware Optimization to Enhance the Perception of Transparent Overlapped Charts. IEEE Transactions on Visualization & Computer Graphics (impact factor: 4.7, in press)

Ray, B., Huntsinger, D., Christian, K., Gillenwater, L., Rinderle, A., Dir, A., Aalsma, M., **Reda, K**. Real-Time Dashboard for Identifying Overdose Touchpoints in Indiana. Journal of Public Health Management & Practice 31(1):29-33, 2025 (impact factor: 2.65)

Dir, A., Gillenwater, L., Wao, M., Smith, J., Short, C., Schwartz, K., **Reda, K.**, Aalsma, M., Ray, B. Descriptive Analysis of Recommendations Made by County-level Overdose Fatality Review Teams in Indiana to Combat the Opioid Epidemic. Drug and Alcohol Dependence, 2024 (impact factor: 3.9)

Koonchanok, R.+, Papka, M., **Reda, K**. Trust Your Gut: Comparing Human and Machine Inference from Noisy Visualizations. IEEE Transactions on Visualization & Computer Graphics (Proceedings of VIS'24), 2024 (acceptance rate: 23%)

Mateevitsi, V., Papka, M., **Reda, K**. Science in a Blink: Supporting Ensemble Perception in Scalar Fields. Proceedings of VIS'24: IEEE Visualization Conference. St. Pete Beach, FL, Oct 13-28, 2024 (acceptance rate: 31%)

Salvi, A.+**,** Gillenwater, L., Cockrum, B., Wiehe, S., Christian, K., Cayton, J., Bailey, T., Schwartz, K., Dir, A., Ray, B., Aalsma, M., **Reda, K**. Development of a Real-Time Dashboard for Overdose Touchpoints: User-Centered Design Approach. JMIR Human Factors 2024;11:e57239 (impact factor: 2.6)

Dir, A., O'Reilly, L., Pederson, C., Schwartz, K., Brown, S., **Reda, K.,** Gillenwater, L., Gharbi, S., Wiehe, S., Adams, Z., Hulvershorn, L., Zapolski, T., Boustani, M., Aalsma, M. Early Development of Local Data Dashboards to Depict the Substance Use Care Cascade for Youth Involved in the Legal System: Qualitative Findings from End Users. BMC Health Services Research 24(687), 2024

Salvi, A+, Lu, K., Wang, Y., Papka, M. E., **Reda, K**. Color Maker: a Mixed-Initiative Approach for Creating Accessible Color Maps. In Proceedings of *CHI'24*: ACM Conference on Human Factors in Computing Systems. Honolulu, HI, May 11-17, 2024 (acceptance rate: 26%)

Koonchanok, R.+, **Reda, K**. Could Humans Outshine AI in Visual Data Analysis? Workshop on Trust and Reliance in Evolving Human-AI Workflows (TREW) at CHI'24. Honolulu, HI, May 11-17, 2024

Koonchanok, R.+, Tawde, G.+, Narayanasamy, G.+, Walimbe, S.+, **Reda, K.** Visual Belief Elicitation Reduces the Incidence of False Discovery. In Proceedings of *CHI'23*: ACM Conference on Human Factors in Computing Systems. April 23-28, 2023 (**Honorable Mention for Best Paper**, acceptance rate: 28%)

Lu, K., **Reda, K.**, Deussen, O., Wang, Y. Interactive Context-Preserving Color Highlighting for Multiclass Scatterplots. In Proceedings of *CHI'23*: ACM Conference on Human Factors in Computing Systems. April 23-28, 2023 (acceptance rate: 28%)

Koonchanok, R.+, Daulatabad, V. S, **Reda, K.**, Janga S. C. Sequoia: a Framework for Visual Analysis of RNA Modifications from Direct RNA Sequencing Data. Methods in Molecular Biology, 2023

Reda, K. Rainbow Colormaps: What Are They Good and Bad for? *IEEE Transactions on Visualization and Computer Graphics*, 2022 (impact factor: 5.226)

Koonchanok, R.+, Daulatabad, V. S.; Mir, Q.; **Reda, K.**, Janga S. C. Sequoia: an Interactive Visual Analytics Platform for Interpretation and Feature Extraction from Nanopore Sequencing Datasets. BMC Genomics 22(513), 2021 (impact factor: 3.73)

Reda, K., Salvi, A.+, Gray, J.+, Papka, M. E. Color Nameability Predicts Inference Accuracy in Spatial Visualizations. In Proceedings of the *EuroVis'21* Conference (also appearing as a journal article in Computer Graphics Forum), 2021 (**Best Paper award**, acceptance rate: 26%)

Koonchanok, R.+, Baser, P.+, Sikharam, A.+, Raveendranath, N. K.+, **Reda, K.** Data Prophecy: Exploring the Effects of Belief Elicitation in Visual Analytics. In Proceedings of *CHI'21*: ACM Conference on Human Factors in Computing Systems. May 8-13, 2021 (acceptance rate: 26%)

Reda, K., Szafir, D. A. Rainbows Revisited: Modeling Effective Colormap Design for Graphical Inference. *IEEE Transactions on Visualization and Computer Graphics, 2020 (*also appearing at IEEE VIS'20, acceptance rate: 25%, journal impact factor: 5.226)

Heyer, J.+, Raveendranath, N. K.+, **Reda, K**. Pushing the (Visual) Narrative: the Effects of Prior Knowledge Elicitation in Provocative Topics. In Proceedings of *CHI'20*: ACM Conference on Human Factors in Computing Systems. Honolulu, HI, April 25-30, 2020 (acceptance rate: 23%)

Reda, K., Papka, M. E. Evaluating Gradient Perception in Color-Coded Scalar Fields. In Proceedings of *VIS'19*: IEEE Conference on Visualization (short paper track). Vancouver, BC, Canada, Oct 20-25, 2019 (acceptance rate: 31%)

Reda, K., Potts, C.+, Childers, T.+ Dynamic Glyphs: Appropriating Causality Perception in Multivariate Visual Analysis. In Proceedings of the Vis X Vision workshop: Novel Directions in Vision Science and Visualization Research. Vancouver, BC, Canada, Oct 20, 2019

Choi, I. K.+, Raveendranath, N. K.+, Westerfield, J.+, **Reda. K**. Visual (dis)Confirmation: Validating Models and Hypotheses with Visualizations. In Proceedings of *IV'19*: the 23rd International Conference on Information Visualization. Adelaide, Australia, July 16-19, 2019, IEEE

Choi, I. K.+, Childers, T., Raveendranath, N.+, Mishra, S.+, Harris, K.+, and **Reda, K**. 2019. Concept-Driven Visual Analytics: an Exploratory Study of Model- and Hypothesis-Based Reasoning with Visualizations. In Proceedings of *CHI'19*: ACM Conference on Human Factors in Computing Systems Proceedings, Glasgow, Scotland UK, May 4–9, 2019, ACM (acceptance rate: 23.7%)

Reda, K., Nalawade, P.+, Ansah-Koi, K.+ Graphical Perception of Continuous Quantitative Maps: the Effects of Spatial Frequency and Colormap Design. In Proceedings of ACM CHI'18: Conference on Human-Factors in Computing Systems. Montreal, Canada, April 21-26, 2018 (acceptance rate: 25.7%)

Fujiwara, T.+, Malakar, P., **Reda, K.**, Vishwanath, V., Papka, M., Ma, K. L. A Visual Analytics System for Optimizing Communications in Massively Parallel Applications. In Proceedings of VAST'17: IEEE Conference on Visual Analytics Science and Technology. Phoenix, AZ, October 1-6, 2017 (acceptance rate: 30%)

Reda, K., Johnson, A., Papka, M., Leigh, J. Modeling and Evaluating User Behavior in Exploratory Visual Analysis. Information Visualization 15(4):325-339, 2016 (impact factor: 2.3)

J. Aurisano, **Reda, K.**, Johnson, A., Marai, G. E., Leigh, J. A Large-Scale Comparative Genome Visualization for Big Displays. BMC Bioinformatics 16(11):6 Springer, 2015 (impact factor: 3.242)

Reda, K., Johnson, A., Papka, M., Leigh, J. Effects of Display Size and Resolution on User Behavior and Insight Acquisition in Visual Exploration. In proceedings of *ACM CHI'15* conference on Human Factors in Computing Systems, Seoul, Korea, Apr 18–23, 2015, ACM (acceptance rate: 25%)

Nam, S., **Reda, K.**, Renambot, L., Johnson, A., Leigh, J. Multiuser-Centered Resource Scheduling for Collaborative Display Wall Environments. Future Generation Computer Systems 45(1):162–175, Elsevier, 2015 (impact factor: 5.768)

Knoll, A., Wald, I., Navratil, P., Bowen, A., **Reda, K.**, Papka, M., Gaither, K. RBF Volume Ray Casting on Multicore and Manycore CPUs. Computer Graphics Forum 33(3):71–80 (also appearing in the Proceedings of *EuroVis '14*), Eurographics Association, 2014 (acceptance rate: 26%)

Reda, K., Johnson, A., Leigh, J., Papka, M. Evaluating User Behavior and Strategy During Visual Exploration. Proceedings of the 5th Workshop on Beyond Time and Errors: Novel Evaluation Methods for Visualization (*BELIV'14*), Paris, France, Nov 10, 2014. pp. 41–45, ACM

Reda, K., Chau, D., Mostafa, Y., Nagrajan, S., Leigh, J., Nishimoto, A., Kahler, E., Demeter, J. Design Guidelines for Multiplayer Video Games on Multi-touch Displays. Computers in Entertainment 11(1):1–17, ACM, 2014

Reda, K., Offord, C., Johnson, A., Leigh, J. Expanding the Porthole: Leveraging Large, High- Resolution Displays in Exploratory Visual Analysis. In *CHI'14* EA on Human Factors in Computing Systems, Toronto, ON, Canada, Apr 26–May 1, pp. 2047–2052, ACM

Knoll, A., Brownlee, C., **Reda, K.**, Haymore, B., Papka, M., Pascucci, V. The Desktop is Dead, Long Live the Workstation! In the workshop on the Death of the Desktop: Envisioning Visualization without Desktop Computing, Paris, France, Nov 9, 2014

Reda, K., Febretti, A., Knoll, A., Aurisano, J., Leigh, J., Johnson, A., Papka, M., Hereld, M. Visualizing Large, Heterogenous Data in Hybrid-Reality Environments. Computer Graphics and Applications 33(4): 38–48, IEEE, 2013 (impact factor: 1.627)

Reda, K., Knoll, A., Nomura, K., Papka, M., Johnson, A., Leigh, J. Visualizing Large-Scale Atomistic Simulations in Ultra-Resolution Immersive Environments. In proceedings of the 2013 IEEE Symposium on Large-Scale Data Analysis and Visualization (*LDAV '13*), Atlanta, GA, Nov 13-14, 2013. pp. 59–65, IEEE

Reda, K., Mateevitsi, V., Offord, C. A Human-Computer Collaborative Workflow for the Acquisition and Analysis of Terrestrial Insect Movement in Behavioral Field Studies. EURASIP Journal on Image and Video Processing 2013:48, Springer, 2013

Offord, C., **Reda, K.**, Mateevitsi, V. Context-Dependent Navigation in a Collectively Foraging Species of Ants, *Messor cephalotes*. Insectes Sociaux 60(3): 361–368, Springer, 2013

Reda, K., Aurisano, J., Febretti, A., Leigh, J., Johnson, A. Visualization Design Patterns for Ultra-Resolution Displays Environments. In proceedings of the workshop on Visualization Infrastructure and Systems Technology (*VISTech'13*), Nov 22, Denver, CO, 2013

Reda, K., Johnson, A., Mateevitsi, A., Offord, C., Leigh, J. Scalable Visual Queries for Data Exploration on Large, High-Resolution 3D Displays. In Proceedings of the *SC'12* Companion: High Performance Computing, Networking Storage and Analysis, Salt Lake City, UT, Nov, 2012. pp. 196–205. IEEE

Reda, K., Tantipathananandh, C., Johnson, A., Leigh, J., Berger-Wolf, T. Visualizing the Evolution of Community Structures in Dynamic Social Networks. Computer Graphics Forum 30(3):1061– 1070 (also appearing in the Proceedings of *EuroVis'11*), Eurographics Association, 2011 (acceptance rate: 27%)

Extended Abstracts:

Reda, K. Automated or Manual? Qualitative or Quantitative? Keeping the Right Balance in Data Science with Visual Analytics. Extended Abstract at the IUPUI Data Science Summit. March, 2019

Choi, I. K.+, Mishra, S.+, Harris, K.+, Kumar, N.+, Childers, T.+, **Reda, K**. "Towards Concept-Driven Analytics." Poster at the IEEE Conference of Visual Analytics Science and Technology (VAST). November, 2018

J. Casey, B. Ji, S. Shaoie, A. Mardinoglu, P. Sarathi Sen, O. Jahn, **K. Reda**, K., J. Leigh, M. J. Follows, J. Nielsen, D. M. Karl.A "Prochlorococcus proving ground for constraint-based metabolic modeling and multi-`omics data integration." American Geophysical Union, Ocean Sciences Meeting, New Orleans, LA, December, 2016

Reda, K., Gonzalez, A.+, Leigh, J., Papka, M. Tell Me What Do You See: Detecting perceptually-separable visual patterns via clustering of image-spaces features in visualizations. Poster at *IEEE VIS'15*, Chicago, IL, Oct 25–30, 2015

Aurisano, J., Kumar, A., Gonzalez, A.+, **Reda, K.**, Di Eugenio, B., Leigh, J., Johnson, A. "Show Me Data": Observational study of a conversational interface in visual data exploration. Poster at *IEEE VIS'15*, Chicago, IL, Oct 25–30, 2015

Aurisano, J., **Reda, K.**, Johnson, A., Leigh, J. Bacterial Gene Neighborhood Investigation Environment: A Large-Scale Genome Visualization for Big Displays. IEEE Symposium on Large- Scale Data Analysis and Visualization (*LDAV'14*), France, Paris, Nov 9-10, 2014, IEEE (Best Poster Award)

Aurisano, J., **Reda, K.**, Johnson, A., Leigh, J. Bacterial Gene Neighborhood Investigation Environment: A Large-Scale Genome Visualization for Big Displays. Poster at the 4th Symposium on Biological Data Visualization (*BioVis'14*), 2014

Mateevitsi, V., **Reda, K.**, Leigh, J., Johnson, A. HealthBar: A Persuasive Ambient Display to Improve the Office Worker's Well Being. In Proc. of 5th Augmented Human Conference, ACM

Reda, K., Tantipathananandh, C., Berger-Wolf, T., Leigh, J., Johnson, A. SocioScape—a Tool for Interactive Exploration of Spatio-Temporal Group Dynamics in Social Networks. Poster at IEEE Information Visualization Conference (*InfoVis'09*), Atlantic City, NJ, 2009

Non-refereed Articles:

Reda, K., Gonzalez, A., Leigh, J., Papka, M. Tell Me What Do You See: Detecting and Summarizing Perceptually-Separable Patterns for Exploratory Data Analysis. Argonne National Laboratory Postdoctoral Research Symposium, Argonne, IL, 8, 2015

Reda, K. Exploratory Visual Analysis in Large, High-Resolution Display Environments. PhD Thesis, University of Illinois at Chicago, 2014

Reda, K., Chau, D., Dargad, R. Understanding the Interaction of Visual and Verbal Metaphors from Eye Gaze Behavior. Technical report, University of Illinois at Chicago, 2011

Reda, K. SocioScape—Spatio-Temporal Visual Analysis of Group Dynamics in Social Networks. MS Thesis, University of Illinois at Chicago, 2009

Kahler, E., Hur, H., **Reda, K.**, Kooima, R., Chau, D., Jagodic, R., Renambot, L., Johnson, A., Leigh, J. Design Challenges in Creating a High Resolution LCD-based Multi-touch Display. Technical report, Electronic Visualization Laboratory, 2009

RESEARCH PRESENTATIONS (invited & contributed):

Science in a Blink: Supporting Ensemble Perception in Scalar Fields	VIS'24: IEEE Visualization Conference	10/17/2024
Towards Trustworthy Visual Analytics	Electronic Visualization Lab, UIC	11/4/2023
Rainbow Colormaps: What are they good and bad for?	VIS'23: IEEE Visualization Conference	10/26/2023
Visual Belief Elicitation Reduces the Incidence of False Discovery	CHI'23: ACM Conference on Human Factors in Computing Systems	4/25/2023

Towards Trustworthy Visual Analytics	DePaul University, School of Computing	11/4/2022
Towards Trustworthy Visual Analytics	University of Utah, Scientific Computing and Imaging Institute	10/26/2022
Color Nameability Predicts Inference Accuracy in Spatial Visualization	EuroVis'21: Eurographics Visualization Conference	6/15/2021
Towards Trustworthy Analytics	Institute for Artificial Intelligence, IUPUI	2/19/2021
Modeling Colormap Design for Graphical Inference	VIS'20: IEEE Visualization Conference	10/27/2020
Data Visualization for Discovery	SoIC - POLIS Research Symposium	10/30/2020
Evaluating Gradient Perception in Color-Coded Scalar Fields	VIS'19: IEEE Visualization Conference	10/25/2019
Dynamic Glyphs: Appropriating Causality Perception in Multivariate Visual Analysis	IEEE Vis X Vision workshop: Novel Directions in Vision Science and Visualization Research	10/20/2019
Visual (dis)Confirmation: Validating Models and Hypotheses with Visualizations	23rd International Conference on Information Visualization	7/17/2019
Concept-Driven Visual Analytics: an Exploratory Study of Model- and Hypothesis-Based Reasoning with Visualizations	ACM CHI'19: Conference on Human Factors in Computing Systems	5/8/2019
Automated or Manual? Qualitative or Quantitative? Keeping the Right Balance in Data Science with Visual Analytics	IUPUI Data Science Summit	3/22/2019
Graphical Perception of Continuous Quantitative Maps: the Effects of Spatial Frequency and Colormap Design	ACM CHI'18: Conference on Human Factors in Computing Systems	4/24/2019
Data Visualization: Design & Critique	IUPUI Community Engagement & Professional Development	3/15/2018
Interactive Visualization and Analysis of Ecological Time Series	Argonne National Laboratory, Division of Environmental Sciences	7/14/2016
Seeing the Forest Despite the Trees: Interactive Visualization Tools for Data Analysis and Communication	Northern Illinois University	3/10/2016
Understanding the Dynamics of the Natural World through Interactive Visualization	University of Utah, Department of Geography	3/8/2016

Data Visualization for Discovery and Learning	Natural History Museum of Utah	2/2/2016
Understanding the Dynamics of the Natural World through Interactive Visualization	University of Utah, School of Computing	2/1/2016
Seeing (Big) Data: Interactive Visualization Tools for Analysis & Communication	Institute for Defense Analyses	2016
Seeing the Forest Despite the Trees: Interactive Visualization Tools for Analysis and Storytelling with Big Data	Texas Tech University	2015
Visualizing Large-Scale 'Omics Data	University of Hawaii, Center for Microbial Oceanography	2015
Visualization Instruments for Big Data	University of Hawaii, Center for Cyberinfrastructure and Information Technology	2015
Advanced Visualization Environments for Scientific Discovery and Collaboration	University of Damascus	2010

TEACHING

UNDERGRADUATE:

Course	Title	Format	Role	Term	Enrollment
NEWM-N 328	Visualizing Information	Online	Instructor	Spring'25	46
NEWM-N 328	Visualizing Information	Online	Instructor	Fall'24	34
NEWM-N 328	Visualizing Information	Online	Instructor	Fall'22	38
NEWM-N 328	Visualizing Information	Online	Instructor	Spring'22	35
NEWM-N 328	Visualizing Information	Online	Instructor	Fall'21	21
NEWM-N 328	Visualizing Information	Lecture	Instructor	Spring'21	23
NEWM-N 328	Visualizing Information	Lecture	Instructor	Spring'20	16
NEWM-N 328	Visualizing Information	Lecture	Instructor	Spring'19	16
INFO-I 499	Readings & Research in Informatics (learner: Caleb Potts)	Independent Study	Instructor	Summer'18	1
NEWM-N 328	Visualizing Information	Lecture	Instructor	Spring'18	35
NEWM-N 328	Visualizing Information	Lecture	Instructor	Spring'17	29

GRADUATE:

INFO-H 517	Visualization Design, Analysis, and Evaluation	Lecture	Co-Instructor	Fall'23	48

INFO-H 517	Visualization Design, Analysis, and Evaluation	Lecture	Instructor	Spring'23	20
INFO-H 517	Visualization Design, Analysis, and Evaluation	Lecture	Instructor	Fall'22	53
INFO-H 517	Visualization Design, Analysis, and Evaluation	Online	Instructor	Spring'22	24
INFO-H 517	Visualization Design, Analysis, and Evaluation	Lecture	Instructor	Fall'21	42
INFO-H 517	Visualization Design, Analysis, and Evaluation	Lecture	Instructor	Fall'20	45
INFO-H 517	Visualization Design, Analysis, and Evaluation	Lecture	Instructor	Fall'19	23
INFO-I 890	Thesis Readings and Research (learner: Ratanond Koonchanok)	Independent Study	Instructor	Fall'19	1
INFO-H 790	Informatics Research Rotation (learner: Carly Daley)	Independent Study	Instructor	Spring'19	1
INFO-H 517	Visualization Design, Analysis, and Evaluation	Lecture	Instructor	Fall'18	30
INFO-H 694	Thesis in Human-Computer Interaction (learner: Swati Mishra)	Independent Study	Instructor	Spring'18	1
INFO-H 517	Visualization Design, Analysis, and Evaluation	Lecture	Instructor	Fall'17	31
INFO-H 694	Thesis in Human-Computer Interaction (learner: Swati Mishra)	Independent Study	Instructor	Fall'17	1
INFO-H 554	Independent Study in Human-Computer Interaction (learner: Adriana Garcia)	Independent Study	Instructor	Spring'17	1
INFO-H 590	Interactive Visual Analytics	Lecture	Instructor	Fall'16	33

MENTORING

Amey Salvi	PhD advisor	2020 – present
Ratanond Koonchanok	PhD advisor	2018 – 2024
Van Lian	Undergraduate research (NSF REU)	2020 – 2021
Abeer Alsairi	PhD thesis committee (U of Illinois Chicago)	2020 – 2021
Abhinav Sikharam	MS research advisor	2020 – 2021

Parul Baser	MS research advisor	Sep 2019 – March 2021
Jendy Martinez	Undergraduate research (NSF REU)	Sep 2019 – Jan 2020
Nathalie Pimentel Gil	Undergraduate research (NSF REU)	Sep 2019 – Jan 2020
Jared Westerfield	Undergraduate research (NSF REU)	Nov 2018 – Jan 2020
Jeremy Heyer	PhD advisor	Aug 2018 – Dec 2019
Taylor Childers	MS research advisor	May 2018 – May 2019
Nirmal Kumar Raveendranath	MS research advisor	May 2018 – May 2019
Caleb Potts	Undergraduate research	April 2018 – May 2019
Jeremy Hochstedler	PhD advisor	Aug 2017 – March 2018
Eric Vorm	PhD thesis committee advisor	Aug 2017 – Jan 2019
Kyle Harris	Undergraduate research advisor	May 2017 – May 2018
In Kwon Choi	MS research advisor	Jan 2017 – May 2019
Adriana Alvarado Garcia	MS thesis committee member	Sep 2016 – May 2017
Pratik Nalawade	MS research advisor	Aug 2016 – May 2018
Kate Ansah-Koi	MS research advisor	Aug 2016 – May 2017
Swati Mishra	MS research & thesis advisor	Oct 2016 – May 2018
Takanori Fujiwara	PhD mentor (co-advised with Papka & Ma)	May 2016 – March 2017

TEACHING ADMINISTRATION AND CURRICULUM DEVELOPMENT

New Course Development: **INFO-H 517** is a graduate course designed to introduce students to core principles and techniques in data visualization and visual analytics. Students develop significant projects to design and create their own interactive visualizations using the latest tools. They also develop competency to undertake empirical research in the field.

Major Course Revision: NEWM-N 328 is an introductory course in information visualizing. The course has been thoroughly refreshed for its Spring 2017 edition. This new edition conforms to latest pedagogical practices in the field of information visualization. Students also learn to use 3 data visualization tools: Tableau, Polaris, and D3.

SERVICE

UNIVERSITY SERVICE:

DEPARTMENT

HCC P&T Committee	Committee member	2022 – 2024
Data Science Graduate Program	Program director	2024 – present 2022 – 2023
HCI Graduate Admissions and Curriculum Committee	Committee member	2016 – 2021
Data Science Admissions and Curriculum Committee	Committee member	2016 – present

SCHOOL

Faculty Policy Committee	Committee member	2024 – present
Computer Science Faculty Search	Committee member	2023
Data Science Lecturer Search Committee	Committee member	2022 – 2023
Data Science Faculty Search	Committee chair	2020 – 2021
Faculty Policy Committee	Elected representative	2018 – 2020
Program Review and Assessment Committee (PRAC)	Committee member	2017 – 2021
Informatics Undergraduate Curriculum Committee	Committee member	2016 – Present
Library & Information Sciences TT Faculty Search	Committee member	2017 – 2018
Data Science TT Faculty Search	Committee member	2016 – 2017

CAMPUS

Research Affairs	School representative	2022 – 2023
IUPUI Institute for Artificial Intelligence	Steering committee member	2020 – 2023

PROFESSIONAL SERVICE:

NATIONAL

National Science Foundation	Panelist	2023
US Department of Energy, Advanced Scientific Computing Research	Grants reviewer & panelist	2022
National Science Foundation	Panelist	2022
National Science Foundation	Panelist	2021
National Science Foundation	Panelist	2020
National Science Foundation	Panelist	2019
National Science Foundation	Panelist	2018

National Science Foundation	Panelist	2017
INTERNATIONAL		
IEEE Visualization Conference (VIS'25)	Publicity Co-chair	2025
ACM CHI'24	Reviewer	2024
IEEE/EG EuroVis	Reviewer	2024
ACM Conference on Human Factors in Computing Systems (CHI'24)	Reviewer	2024
IEEE Visualization Conference (VIS'23)	Program committee	2023
ACM Conference on Human Factors in Computing Systems (CHI'23)	Associate Chair	2023
IEEE Computer Graphics and Applications	Reviewer	2022 – 2023, 2025
IEEE Transactions on Visualization and Computer Graphics	Reviewer	2020 – 2025
IEEE VIS'22 Conference on Visualization	Program committee	2022
EuroVis'22 (Eurographics Visualization conference)	Program Committee	2022
ACM Conference on Human Factors in Computing Systems (CHI'22) (award for Excellent Reviewing)	Associate Chair	2021
IEEE VIS'21 Conference on Visualization	Program committee	2021
ACM Conference on Human Factors in Computing Systems (CHI'21)	Associate Chair	2020
IEEE Symposium on Large-Scale Data Analysis & Visualization (LDAV'20)	Poster co-chair	2020
Workshop on Visualization Psychology	Program committee	2020
Fisheries Research (journal)	Paper reviewer	2020
ACM Conference on Human Factors in Computing Systems (CHI'20) (received Award for Excellent Reviewing)	Associate Chair	2019
IEEE Symposium on Large-Scale Data Analysis & Visualization (LDAV'19)	Poster co-chair	2019
ACM Conference on Interactive Surfaces and Spaces (ISS'19)	Reviewer	2019
IEEE Symposium on Large-Scale Data Analysis & Visualization (LDAV'18)	Program committee	2018

ACM DIS: Designing Interactive Systems	Paper reviewer	2018
ACM CHI'18: Conference on Human Factors in Computing System	Session chair	2018
ACM CHI (Award for Excellent Reviewing: 2017, 2020x2)	Paper reviewer	2015 – 2019
IEEE Visual Analytics Science and Technology conference (VAST)	Paper reviewer	2013 – 2018
IEEE Information Visualization conference (InfoVis)	Paper reviewer	2015 – 2019
IEEE Scientific Visualization conference (SciVis)	Paper reviewer	2015, 2017
Information Visualization Journal	Reviewer	2017 – 2019
Euro Graphics Visualization Conference (EuroVis)	Paper reviewer	2013 – 2016, 2019
Workshop on In-Situ Extreme-Scale Analysis and Visualization	Program committee	2015
Vienna Science and Technology Fund	Grants reviewer	2015
IEEE Pacific Visualization conference	Paper reviewer	2013 – 2015
3DUI: IEEE Symposium on 3D User Interfaces	Paper reviewer	2015
International Journal of Human-Computer Studies	Paper reviewer	2015, 2018
ACM Computers in Entertainment	Paper reviewer	2012