Alvitta Ottley

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Computer Science and Engineering
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Education

Tufts University

2016 Ph.D. in Computer Science
2013 MSc in Computer Science

Ph.D. Thesis: Toward Personalized Visualizations
Advisor: Remco Chang

State University of New York at Plattsburgh

2010 BSc in Computer Science, *summa cum laude*

Professional Appointments

Washington University in St. Louis, St. Louis, MO, USA

2016– Assistant Professor
Department of Computer Science and Engineering

2016 – Assistant Professor
Department of Psychological and Brain Sciences, *courtesy*

IBM Research, Almaden, CA, USA

Summer 2014 Research Intern
User Systems and Experience Research (USER) Group

IBM Research, Cambridge, MA, USA

Summer 2013 Research Intern
Center for Innovation in Visual Analytics (CIVA) Group

Funding

1/2023–12/2023 Department of Defense: Laboratory for Analytic Sciences (LAS) at North Carolina State University, *Investigating How Individual Differences Influence Algorithm Confidence Interpretations*, $237,154. PIs: Alvitta Ottley, R. Jordan Crouser

9/2022–8/2027 National Science Foundation, CAREER: *Context-Aware Visual Analytics Systems: Evolving the One-Size-Fits-All Approach to Design and Evaluation*, $528,224. PI: Alvitta Ottley

1/2022–12/2022 Department of Defense: Laboratory for Analytic Sciences (LAS) at North Carolina State University, *Personalizing the Delivery of Analytic Products for Individual Decision-Makers*, $225,985. PIs: Alvitta Ottley, R. Jordan Crouser

8/2021–8/2026 National Science Foundation, *HDR Institute: Institute for Data Driven Dynamical Design*, $15,540,749. PI: Eric Toberer, CO-PIS: Alvitta Ottley, Steven Lopez, Adji Bousso, Ryan Adams

1/2021–12/2021 Department of Defense: Laboratory for Analytic Sciences (LAS) at North Carolina State University, *Investigating the Role of Individual Differences in Moderating Goal-Driven vs. Open-Ended Analysis*, $211,911. PIS: Alvitta Ottley, R. Jordan Crouser

1/2020–12/2020 Department of Defense: Laboratory for Analytic Sciences (LAS) at North Carolina State University, *Investigating the Role of Individual Differences in Visual Analytic Work Flows*, $161,901. PIS: Alvitta Ottley, R. Jordan Crouser

1/2019–12/2019 BOEING, *Integrated Computational and Cognitive Workflows for Improved Security and Usability*, $501,725. PI: Alvitta Ottley, CO-PI: William Yeoh

1/2019–12/2019 Department of Defense: Laboratory for Analytic Sciences (LAS) at North Carolina State University, *Investigating the Role of Individual Differences in Visual Analytic Work Flows*, $109,914. PIS: Alvitta Ottley, R. Jordan Crouser

6/2018–5/2023 National Science Foundation, *CRII: SCH: Visualization for Better Medical Decision–Making*, $174,254. PI: Alvitta Ottley

Awards & Distinctions

2023 General Chair: Symposium on Visualization in Data Science (**VDS 2023**)

2022 **EUROVIS 2022** Young Researcher Award

2022 Best Short Paper Award for **EUROVIS 2022**

2022 Invitation to **Schloss Dagstuhl** Seminar on 'Anticipatory Human-Machine Interaction'

2022 NSF Faculty Early Career Development Program (CAREER) Award

2020 Honorable Mention Best Paper Award for **EUROVIS 2020**

2019 Best Paper Award Finalist for **EUROVIS 2019** (Top 5 papers)

2017 NSF Computer and Information Science and Engineering (CISE) Research Initiation Initiative (**CRII**) Award

2017 Invitation to **Schloss Dagstuhl** Workshop on Restructuring **IEEE VIS** for the Future

2016 Selected to attend the **Heidelberg Laureate Forum** – a networking event for "promising young researchers in mathematics and computer science" with recipients of the Abel Prize, the ACM A.M. Turing Award, the ACM Prize in Computing, the Fields Medal, and the Nevanlinna Prize.

2015 Honorable Mention Best Paper Award for **CHI 2015**

2014 Kirk and Janelle Loevner Graduate Fellowship Award, Tufts University

2011 Phi Kappa Phi Love of Learning Award Nominee, SUNY Plattsburgh

2010 Outstanding Computer Science Graduate Award, SUNY Plattsburgh
Grace Hopper Celebration of Women in Computing Scholarship Award
Distributed Research Experience for Undergraduates (DREU)
Inducted into The Honor Society of Phi Kappa Phi, SUNY Plattsburgh
Hudson Scholarship for Academic Excellence in Computer Science, SUNY Plattsburgh

Publications

My Google Scholar profile is available here.

JOURNAL AND PEER-REVIEWED CONFERENCE PAPERS

2023 S. Pandey, and **A. Ottley**. Mini-VLAT: A Short and Effective Measure of Visualization Literacy. *Computer Graphics Forum (CGF)*. (**EUROVIS 2023**).

2023 S Monadjemi, M. Guo, D. Gotz, R. Garett, and **A. Ottley**. Human-Computer Collaboration for Visual Analytics: an Agent-based Framework. *Computer Graphics Forum (CGF)*. (**EUROVIS 2023**).

2023 M. Bancilhon, A. Wright, S. Ha, R. J. Crouser, and **A. Ottley**. Why Combining Text and Visualization Could Improve Bayesian Reasoning: A Cognitive Load Perspective. *Conference on Human Factors in Computing Systems* (**CHI 2023**).

2022 S Monadjemi, S. Ha, Q. Nguyen, H. Chai, R. Garett, and **A. Ottley**. Guided Data Discovery in Interactive Visualizations via Active Search. *IEEE VIS: Visualization & Visual Analytics* (**VIS 2022**).

2022 S. Ha, S Monadjemi, R. Garett, and **A. Ottley**. A Unified Comparison of User Modeling Techniques for Information Relevance and Exploration Bias. *IEEE VIS: Visualization & Visual Analytics* (**VIS 2022**).

2022 S. Gathani, S. Monadjemi, **A. Ottley**, and L. Battle. A Grammar-Based Approach for Applying Visualization Taxonomies to Interaction Logs. *Computer Graphics Forum (CGF). Appeared in proceedings of **EUROVIS 2022***, 41(3): 489–500.

2022 A. Suh, A. Mosca, S. Robinson, Q, Pham, D. Cashman, **A. Ottley**, R. Chang. Inferential Tasks as an Evaluation Technique for Visualization. *24th EG Conference on Visualization* ⋆ ***BEST PAPER AWARD*** ⋆ (**EUROVIS 2022**).

2022 A. Kumar, S. L. Vasileiou, M. Bancilhon, **A. Ottley**, and W. Yeoh. VizXP: A Visualization Framework for Conveying Explanations to Users in Model Reconciliation Problems. *32nd International Conference on Automated Planning and Scheduling* (**ICAPS 2022**).

2021 A. Mosca, **A. Ottley**, and R. Chang. Does Interaction Improve Bayesian Reasoning with Visualization?. *Conference on Human Factors in Computing Systems* (**CHI 2021**).

2020 K. Xu, **A. Ottley**, C. Walchshofer, M. Streit, R. Chang, and J. Wenskovitch. Survey on the Analysis of User Interactions and Visualization Provenance. *Computer Graphics Forum (CGF). Appeared in proceedings of **EUROVIS 2020***, 39(3): 757–783.

2020 Z. Liu, R. J. Crouser, **A. Ottley** . Survey on Individual Differences in Visualization. *Computer Graphics Forum (CGF). Appeared in proceedings of **EUROVIS 2020***, 39(3): 693–712.

2020 M. Bancilhon, Z Liu, and **A. Ottley**. Let's Gamble: How a Poor Visualization Can Elicit Risky Behavior. *IEEE VIS: Visualization & Visual Analytics* (**VIS 2020**).

2020 R. J. Crouser, **A. Ottley**, K. Swanson, and A. Montoly. Investigating the Role of Locus of Control in Moderating Complex Analytic Workflows. *22nd EG/VGTC Conference on Visualization* ⋆ ***HONORABLE MENTION BEST PAPER AWARD*** ⋆ (**EUROVIS 2020**).

2019 **A. Ottley**, R. Garnett, and R. Wan. Follow The Clicks: Learning and Anticipating Mouse Interactions During Exploratory Data Analysis. *Computer Graphics Forum (CGF)* ⋆ *BEST PAPER AWARD FINALIST (TOP 5)* ⋆ *Appeared in* ***EUROVIS 2019****,* 38(3): 41–52.

2019 Q. Zhi, **A. Ottley**, and R. Metoyer. Linking and Layout: Exploring the Integration of Text and Visualization in Storytelling. *Computer Graphics Forum (CGF). Appeared in proceedings of* ***EUROVIS 2019****,* 38(3): 675–685.

2019 **A. Ottley**, A. Kaszowska, E. Peck, and R. J. Crouser. The Curious Case of Combining Text and Visualization. *21st EG/VGTC Conference on Visualization* (**EUROVIS 2019**).

2017 A. Hakone, L. Harrison, **A. Ottley**, N. Winters, C. Gutheil, P. KJ Han, and R. Chang. PROACT: Iterative Design of a Patient-Centered Visualization for Effective Prostate Cancer Health Risk Communication. *IEEE Transactions on Visualization & Computer Graphics (TVCG). Appeared in* ***INFOVIS 2016****,* 23(1): 601 – 610.

2016 **A. Ottley**, E. M. Peck, L. T. Harrison, D. Afergan, C. Ziemkiewicz, H. A. Taylor, P. KJ Han, and R. Chang. Improving Bayesian Reasoning: The Effects of Phrasing, Visualization, and Spatial Ability. *IEEE Transactions on Visualization & Computer Graphics (TVCG). Appeared in* ***INFOVIS 2015****,* 22(1): 529 – 538.

2015 **A. Ottley**, H. Yang, and R. Chang. Personality as a Predictor of User Strategy: How Locus of Control Affects Search Strategies on Tree Visualizations. *Conference on Human Factors in Computing Systems,* ⋆ *HONORABLE MENTION BEST PAPER AWARD* ⋆ (**CHI 2015**).

2015 **A. Ottley**, R. J. Crouser, C. Ziemkiewicz, and R. Chang.. Manipulating and Controlling for Personality Effects on Visualization Tasks. *Information Visualization (IVI),* 14(3): 223 – 233.

2014 E. Brown, **A. Ottley**, J. Zhao, Q. Lin, R. Souvenir, A. Endert, and R. Chang. Finding Waldo: Learning About Users From Their Interactions. *IEEE Transactions on Visualization & Computer Graphics (TVCG). Appeared in* ***VAST 2014****,* 20(12): 1663 – 1672.

2013 E.M. Peck, B.F. Yuksel, **A. Ottley**, R.J.K. Jacob, and R. Chang. Using fNIRS brain sensing to evaluate information visualization interfaces. *Conference on Human Factors in Computing Systems* (**CHI 2013**).

2013 J. E. Gilbert, J. Dunbar, **A. Ottley**, and J. M. Smotherman. Anomaly Detection in Electronic Voting Systems. *Information Design Journal (IDJ),* 20(3): 194–206.

2013 C. Ziemkiewicz, **A. Ottley**, R. J. Crouser, A. Yauilla, S. L. Su, W. Ribarsky, and R. Chang. How Visualization Layout Relates to Locus of Control and Other Personality Factors.. *IEEE Transactions on Visualization & Computer Graphics (TVCG),* 19(7): 1109–1121.

2012 C. Ziemkiewicz, **A. Ottley**, R. J. Crouser, K. Chauncey, S. L. Su, and R. Chang. Understanding Visualization by Understanding Individual Users. *IEEE Computer Graphics and Applications (CG&A),* 32(6): 88–94.

WORKSHOP PAPERS (PEER REVIEWED)

2022 R. Kasumba, S. Pandey, V. Patel, M. Wolfson, and **A. Ottley**. User Engagement with COVID-19 Visualizations on Twitter. *IEEE VIS 2022 Workshop on Visualization for Communi-*

cation (VISCOMM) (**VIS 2022**).

2021 A KUMAR, SL VASILEIOU, M BANCILHON, **A. OTTLEY**, AND W YEOH. VizXP: A Visualization Framework for Conveying Explanations to Users in Model Reconciliation Problems. *ICAPS 2021 Workshop on Explainable AI Planning* (**ICAPS 2021**).

2021 C PLANT, **A. OTTLEY**, L GOU, T MÖLLER, A PERER, A LEX, AND J SHAO. VDS'21: Visualization in Data Science. *Proceedings of the 27th ACM SIGKDD Conference on Knowledge Discovery & Data Mining* (**KDD 2021**).

2020 M. BANCILHON AND **A. OTTLEY**. Did You Get The Gist Of It? Understanding How Visualization Impacts Decision-Making. IEEE VIS 2020 Workshop on Visualization Psychology, (**VIS 2020**).

2020 S. HA, A. KERN, M. BANCILHON, AND **A. OTTLEY**. Expectation Versus Reality: The Failed Evaluation of a Mixed-Initiative Visualization System. IEEE VIS 2020 Workshop Celebrating the Scientific Value of Failure (FailFest), (**VIS 2020**).

2020 A. MOSCA, **A. OTTLEY**, AND R. CHANG. Does Interaction Improve Bayesian Reasoning with Visualization?. IEEE VIS 2020 Workshop on Visualization for Communication (VisComm), (**VIS 2020**).

2019 D. CASHMAN, Y. WU, **A. OTTLEY**, AND R. CHANG. Inferential Tasks as a Data-Rich Evaluation Method for Visualization. IEEE VIS 2019 Workshop on EVIVA-ML, (**VIS 2019**).

2013 **A. OTTLEY**, E.M. PECK, L. HARRISON, AND R. CHANG. The Adaptive User: Priming to Improve Interaction. Many People, Many Eyes: Aggregating Influences of Visual Perception on User Interface Design, *Conference on Human Factors in Computing Systems* (**CHI 2013**).

2012 E.M. PECK, B.F. YUKSEL, L. HARRISON, **A. OTTLEY**, AND R. CHANG. Position Paper: Towards a 3-Dimensional Model of Individual Cognitive Differences. Beyond Time and Errors: Novel Evaluation Methods for Information Visualization, *IEEE VIS* (**VIS 2012**).

CONFERENCE POSTERS , DEMOS, ARTICLES

2022 L. BATTLE **A. OTTLEY**. Testing Theories of Task in Visual Analytics. *ACM Interactions,* 29(3): 22–23.

2021 A KUMAR, S SHAH, M LOWALEKAR, P VARAKANTHAM, **A. OTTLEY**, AND W YEOH. FairVizARD: A Visualization System for Assessing Fairness of Ride-Sharing Matching Algorithms. *Proceedings of the International Conference on Automated Planning and Scheduling* (**ICAPS 2021**).

2020 C. WAYLLACE, S. HA, Y. HAN, J. HU, S. MONADJEMI, W. YEOH, AND **A. OTTLEY**. DRAGON-V: Detection and Recognition of Airplane Goals with Navigational Visualization.. *In Proceedings of the Conference on Artificial Intelligence (AAAI 2020),* 34(9): 13642–13643.

2019 S. MONADJEMI, R. GARNETT, AND **A. OTTLEY**. User Interaction Modeling through Time and Data Space. *IEEE Conference on Visual Analytics Science and Technology* (**VAST 2019**).

2019 Z. LIU, M. BANCILHON, AND **A. OTTLEY**. Icons are Best: Ranking Visualizations for Proportion Estimation. *IEEE Conference on Information Visualization* (**INFOVIS 2019**).

2013 H. Zhao, Q. Lin, **A. Ottley**, and R. Chang. Modeling User Interactions for Complex Visual Search Tasks. *IEEE Conference on Visual Analytics Science and Technology* (**vast 2013**).

2012 **A. Ottley**, R.J. Crouser, C. Ziemkiewicz, and R. Chang. Priming Locus of Control to Affect Performance. *IEEE Conference on Visual Analytics Science and Technology* (**vast 2012**).

BOOK

2020 **A. Ottley**. Adaptive and Personalized Visualization. Synthesis Lectures on Visualization, 7.1,1-117, *Morgan & Claypool*

BOOK CHAPTER

2013 R. J. Crouser, **A. Ottley**, and R. Chang. Balancing Human and Machine Contributions in Human Computation Systems. Handbook of Human Computation, 615–623, *Springer*

TECHNICAL REPORTS AND PREPRINTS

2020 A. Kern and **A. Ottley**. The Effects of Mixed-Initiative Visualization Systems on Exploratory Data Analysis . Washington University, St. Louis, mo, usa. wucse-2020-001

2012 **A. Ottley**, B. Metevier, P.K.J. Han, and R. Chang. Visually Communicating Bayesian Statistics to Laypersons. Tufts University, Medford, ma, usa. tr–2012–02

THESIS

2016 **A Ottley.** Toward Personalized Visualizations. Ph.D. thesis, Tufts University.

Invited Talks

2023 Uniting Human and Machine Intelligence to Support Data Discovery and Decision-Making, University of Washington, Paul G. Allen School of Computer Science & Engineering, (virtual).

2023 Keynote: Uniting Human and Machine Intelligence to Support Data Discovery and Decision-Making, aware-ai nsf Research Traineeship Program, Rochester Institute of Technology, Rochester ny, usa.

2022 Uniting Human and Machine Intelligence to Support Data Discovery and Decision-Making, University of Missouri, Columbia mo, usa.

2022 Context-Aware Visual Analytics Systems: Evolving the One-Size-Fits-All Approach to Design and Evaluation, Saint Louis University, St. Louis, mo, usa.

2022 Context-Aware Visual Analytics Systems: Evolving the One-Size-Fits-All Approach to Design and Evaluation, M-MARC Seminar, Old Dominion University, Norfolk, va, usa.

2022 Uniting Human and Machine Intelligence to Support Data Discovery and Decision-Making., CHIWORK Conversations, (virtual).

2022 Learning from Interaction Traces: Representations, Models, and Predictions., Datapolooza, University of Virginia, (virtual).

2022 The Case for Precision Visualization, Marvin Zelen Symposium, Dana-Farber Cancer Institute, Boston, ma, usa.

2020 Keynote: Using Models and Predictions to Help Humans and Computers Click, IEEE VIS 2020 Workshop on Machine Learning from User Interaction for Visualization and Analytics (**MLUI 2020**), (virtual).

2020 The Role of Individual Differences in Moderating Decision-Making with Visualization, Concepts and Data: An Interdisciplinary Workshop. *A Sawyer Seminar on "Precision and Uncertainty in a World of Data" and Viral Conjunctions Co-Hosted Event*, John Hopkins University (virtual).

2020 Modeling & Predicting User Attributes During Visual Data Exploration, University of Colorado Boulder, (virtual).

2019 Empowering Patients through Visualization, Saint Louis Veterans Affairs Medical Center (**VAMC**), St. Louis, MO, USA.

2019 Empowering Patients through Visualization, VA Saint Louis Health Care System (**VASTLHCS**), St. Louis, MO, USA.

2019 Empowering Your Audience through Visualization: Graphic, Numerical, Historical, #SciComm Thursdays, St. Louis, MO, USA.

2016 Improving Bayesian Reasoning, Visual Analytics Minisymposium (**SIAM**), Boston, MA, USA.

2015 Improving Bayesian Reasoning, IEEE Conference on Information Visualization (**INFOVIS**), Chicago, IL, USA.

2015 Personality as a Predictor of User Stategy, ACM Conference on Human Factors in Computing Systems (**CHI**), Seoul, SOUTH KOREA.

2015 Personality as a Predictor of User Stategy, Tufts Annual Graduate Student Research Symposium, Medford, MA, USA.

2014 Improving Health Risk Communication, Tufts Ignite, Medford, MA, USA.

2014 Unboxing the User, IBM Research Decision Making Workshop, Cambridge, MA, USA.

2014 Personality as a Predictor of User Strategies, IBM Research USER Group Talk Series, Almaden, CA, USA.

2013 Modeling User Interactions for Complex Visual Search Tasks, Poster Presentation at IEEE Conference on Information Visualization (**INFOVIS**), Atlanta, GA, USA.

2013 Risk Visualization, IBM Research Internfest 2013, Cambridge, MA, USA.

2012 Personalized Visualizations, Tufts University Colloquia Series, Medford, MA, USA.

2012 Priming Locus of Control to Affect Performance, Poster Presentation at IEEE VisWeek (**VIS**), Seattle, WA, USA.

2012 Cognition and Evaluation (New Metrics / Measures): How can we measure cognition?, IEEE VisWeek BELIV Workshop (**VIS**), Seattle, WA, USA.

2012 Priming Locus of Control to Affect Performance, Poster Presentation at CRA-W Graduate Cohort, Bellevue, WA, USA.

Professional Service

ORGANIZATION

2023 General Chair. *Symposium on Visualization in Data Science* (**VDS**).

2021– Publicity Chair. *IEEE VIS: Visualization & Visual Analytics* (**VIS**).

2020–2022 Paper Chair. *Symposium on Visualization in Data Science* (**VDS**).

2020–2021 Diversity and Inclusion Chair. *IEEE VIS: Visualization & Visual Analytics* (**VIS**).

2018–2019 Doctoral Consortium Chair. *ACM Richard Tapia Celebration of Diversity in Computing* (**TAPIA**).

WORKSHOPS CO-ORGANIZED

2021 – Visualization in Data Science (**VDS**). *Special Interest Group on Knowledge Discovery and Data Mining 2021, 2022* (**SIGKDD**).

2020 – Symposium on Visualization in Data Science (**VDS**). *IEEE VIS: Visualization & Visual Analytics 2020 – 2022* (**VIS**).

2020 – Visualization for Communication (**VISCOMM**). *IEEE VIS: Visualization & Visual Analytics 2020, 2021* (**VIS**).

JOURNAL REVIEWING (2013–)

IEEE Transactions on Visualization and Computer Graphics (TVCG)
Frontiers in Psychology
ACM Transactions on Interactive Intelligent Systems(TIIS)
IEEE Computer Graphics and Applications (CG&A)
Information & Management (INFMAN)
Information Visualization IVI
Algorithms

CONFERENCE REVIEWING (PROGRAM COMMITTEE MEMBER)

2023 *EUROVIS: Visualization Conference organized by the Eurographics Working Group on Data Visualization* (**EUROVIS**)

2020–2021 *IEEE VIS: Visualization & Visual Analytics* (**VIS**)

2017–2020 *IEEE Information Visualization* (**INFOVIS**)

2019–2020, 2022 *ACM Conference on Human Factors in Computing Systems* (**CHI**)

CONFERENCE REVIEWING (2013–)

*IEEE Information Visualization Conference (**INFOVIS**)*
*IEEE Conference on Visual Analytics Science and Technology (**VAST**)*
*ACM Conference on Human Factors in Computing Systems (**CHI**)*
*ACM User Interface Software and Technology Symposium (**UIST**)*
*EG/VGTC Conference on Visualization (**EUROVIS**)*
*Graphics Interface (**GI**)*

Teaching Activities

Washington University in St. Louis
Instructor, Advanced Visualization (formerly Information Visualization) (CSE 557A)

Spring 2022 27 students, 6.56/7
Spring 2021 9 students, (evals unavailable)
Spring 2020 40 students, 6.64/7
Fall 2018 26 students, 5.39/7
Spring 2018 33 students, 6.6/7
Spring 2017 29 students, 5.67/7

Fall 2016 16 students, 6.54/7

Instructor, Introduction to Visualization (CSE 457A)
Fall 2022 44 students, 6.7/7
Fall 2021 52 students, 5.8/7
Fall 2020 63 students, 4.5/7
Spring 2019 41 students, 5.5/7

Instructor, Research Seminar on Robotics and Human-Computer Interaction (CSE 7200)
Fall 2021 2 students, (evals unavailable)

Tufts University
Teaching Assistant, Introduction to Computer Science (COMP 11), 4 semesters
Teaching Assistant, Introduction to Programming for Business (COMP 10), 1 semester
Teaching Assistant, Discrete Mathematics (COMP 22), 1 semester
Teaching Assistant, Unix System Administration (COMP 150), 1 semester

Student Advising

PHD STUDENTS

2023– Oen McKinley, Washington University in St. Louis, expected graduation: 2027.
2022– Saugat Pandey, Washington University in St. Louis, expected graduation: 2026.
2020– Melanie Banchilhon, Washington University in St. Louis, expected graduation: 2024.
2020– Sunwoo Jennifer Ha , Washington University in St. Louis, expected graduation: 2024.
2019– Shayan Monadjemi , Washington University in St. Louis, expected graduation: 2023.

MASTER'S THESES SUPERVISED

2021–2022 Emma Baker, Washington University in St. Louis.
Thesis: *Information Overload: The Engagement and Virality of Data Visualization in Online Communities*
2019–2020 Adam Kern, Washington University in St. Louis.
Thesis: *The Effects of Mixed-Initiative Visualization Systems on Exploratory Data Analysis*
2017–2018 Ran Wan, Washington University in St. Louis.
Thesis: *Inferring Intent from Interaction with Visualizations*

MASTER'S PROJECTS SUPERVISED

2020–21 Jing Zhang, Washington University in St. Louis.
Project: *An Experiment Platform For Visual Analytic Tasks*
2019–20 Saulet Yskak, Washington University in St. Louis.
Project: *Solving disappearance at GASTech with visual analytic techniques*
2019–20 Xiwei Xuan, Washington University in St. Louis.
Project: *A Machine Learning Approach to the Automatic Classification of Visualization*
2019–20 Jin Han, Washington University in St. Louis.

Project: *LawViews: Visualization of Chinese Legal Decisions*

2019–19 Jesse Huang, Washington University in St. Louis.
Project: *A Survey on the Role of Individual Differences on Visual Analytics Interactions*

2019–19 Amelia Santrach, Washington University in St. Louis.
Project: *Association Rules*

2018–18 David Flasterstein, Washington University in St. Louis.
Project: *Democracy Tycoon*

POST-BACCALAUREATE RESEARCH SUPERVISED

Fall 2021 Bruktawit Teklay Amare, Washington University in St. Louis

UNDERGRADUATE RESEARCH SUPERVISED

2022–2023 Amee Rothman, Washington University in St. Louis
2022–2023 Danni Liu, Washington University in St. Louis
Fall 2022 Mia Collymore Abbas, Washington University in St. Louis
Fall 2022 Naomi Horsford, Washington University in St. Louis
Fall 2021 Marissa Kalkar, Washington University in St. Louis
Summer 2019 James Easton, Center College
Summer 2019 Jonathan Carrasco, Williams College
Summer 2019 Diego Marcano, Swarthmore College
2018–19 Ana Boyer, Washington University in St. Louis
Summer 2018 Luyu Cheng, Shandong University
Summer 2018 Jennifer Sunwoo Ha, New College of Florida
Summer 2018 Robert Costales, Bard College at Simon's Rock
Summer 2017 Surina Puri, Georgia Tech
Summer 2017 Ran Wan, Washington University in St. Louis
Summer 2017 Shayan Monadjemi, University of Texas at Dallas
Summer 2017 Jordan Perry, Lincoln University
Summer 2017 Jennifer Le, Arizona State University
Spring 2017 Ran Wan, Washington University in St. Louis
Spring 2017 Jake Kent, Washington University in St. Louis
Fall 2016 Jacob Pepe, Washington University in St. Louis

HIGH SCHOOL RESEARCH SUPERVISED

Fall 2021 Kaelen Raible, Fort Zumwalt South High School, St. Peters, MO

COMMITTEE MEMBER (PHD)

2023 Sayantan Bhadra, Washington University in St. Louis
2022 Khoi Hoang, Washington University in St. Louis
2022 Dan Zeng, Washington University in St. Louis
2021 Shenghua He, Washington University in St. Louis
2021 Ab Mosca, Tufts University
2021 Athena Tabakhi, Washington University in St. Louis
2021 Oindrila Chatterjee , Washington University in St. Louis
2021 Christabel Wayllace, Washington University in St. Louis

2020 Qiyu Zhi, University of Notre Dame
2018 Abby Stylianou, Washington University in St. Louis
2018 Michelle Ichinco, Washington University in St. Louis
2018 Yajie Yan, Washington University in St. Louis
2018 Kyle Harms, Washington University in St. Louis

COMMITTEE MEMBER (MASTER'S THESES/PROJECTS)

2022 Vishesh Patel, Washington University in St. Louis
2018 Andrew Cukierwar, Washington University in St. Louis
2018 Peter Kim, Washington University in St. Louis
2017 Estee Rebibo, Washington University in St. Louis

University Service

COMPUTER SCIENCE & ENGINEERING

2020–2021 Member, Faculty Position on Race and Ethnicity Search Committee
2017–2019 Co-Chair, Colloquium Series
2017–2019 Member, McKelvey Hall Steering Committee
2017–2018 Member, Faculty Search Committee

WASHINGTON UNIVERSITY

2020– Member, Data Science for Social Impact Advisory Committee
An initiative of the Social Policy Institute
2020 Member, Faculty Position on Race and Ethnicity Search Committee
Sam Fox School of Design and Visual Arts
2019– Member, Faculty Library Council Committee
2018– Member, Institutional Review Board (IRB) Advisory Board
2017–2018 Member, Bring Your Own Idea (BYOI) Makers Committee: Exploring the Role of Creative Work in the Undergraduate Curriculum
2017 Judge, Global Health Case Competition

STUDENT GROUPS

2020– Faculty Mentor, **<CODEBLACK/>**
2017– Faculty Mentor, **GIRLS WHO CODE**
2017 Judge, ARCHHACKS

Professional Affiliations

ACM–SIGCHI

Select Press

McKelvey Engineering to host AI camp for local students
Garnett, Ottley join $15M Institute for Data-Driven Dynamical Design
Imoukhuede, Ottley named among 'Inspiring Black Scientists in America'