Melanie Bancilhon

mbancilhon96.github.io

Department of Computer Science & Engineering
Washington University in St. Louis
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Education

Washington University in St. Louis   Sep 2019 - Present
Ph.D. in Computer Science
Advisor: Dr. Alvitta Ottley

Smith College   Sep 2015 - May 2019
B.A. Computer Science
B.A. Art and Architecture

Publications

Bancilhon M., Wright AJ., Sunwoo H., Crouser R J., Ottley A. (2021) (In Submission). A Cognitive Load Perspective on the Impact of Visualization on Bayesian Reasoning.

Kumar A., Vasileiou S., **Bancilhon M.**, Ottley A. and Yeoh W. (2021) (In Print). VizXP: A Visualization Framework for Conveying Explanations to Users in Model Reconciliation Problems.

Bancilhon M., Constantinides M., Bogucka EP., Aiello LM., Quercia D. (2021). Streetonomics: Quantifying culture using street names. PLoS ONE 16(6): e0252869

Bancilhon, M., Liu, Z., Ottley, A. (2020). Let's Gamble: How a Poor Visualization Can Elicit Risk Behavior. *In 2020 IEEE Visualization Conference (VIS) (pp. 196-200). IEEE.*

Bogucka, E.P., Constantinides, M., Aiello, L.M, Quercia, D., So, W., **Bancilhon, M.** (2020). Cartographic Design of Cultural Maps. *IEEE Transactions on Computer Graphics and Applications.*

Book Chapter

Bancilhon, M., Padilla, L., Ottley, A. (2021) (In Print). Cognitive Frameworks for Decision-Making with Visualization. Book of Visualization Psychology. *Springer*

Peer Reviewed Workshop Papers & Posters

Bancilhon, M., Ottley, A. (2020). Did You Get The Gist Of It? Understanding How Visualization Impacts Decision-Making. *IEEE Transactions on Visualization and Computer Graphics.*

Ha, S., **Bancilhon, M.**, Ottley, A. (2020). Expectation Versus Reality: The Failed Evaluation of a Mixed-Initiative Visualization System. *IEEE Transactions on Visualization and Computer Graphics.*

Liu, Z., **Bancilhon, M.**, Ottley, A. (2019). Icons are Best: Ranking Visualizations for Proportion Estimation. *IEEE Information Visualization.*

Research Experience

Adobe Research   May 2022 - August 2022
Mentors: Alexa Siu, Nedim Lipka, Ryan Rossi
Developed an impact-oriented human-AI teaming framework to improve agreement understanding and optimize decision-making.

Visual Data Analytics Group, Washington University in St. Louis   Sep 2019 - Present
Principal Investigator: Alvitta Ottley
Investigates the impact of visualization on cognitive mechanisms and decision-making.

Human Computation & Visualization Laboratory, Smith College   Jan 2019 - May 2019
Principal Investigator: Jordan R. Crouser
Uncovered gender representation patterns in popular media by applying the Bechdel test to series scripts.

Social Dynamics Group, Nokia Bell Labs   June 2018 - August 2018
Principal Investigator: Daniele Quercia
Researched urban historical, cultural and societal patterns encoded in a city's network of street names.

Teaching Experience

Mentored Teaching Experience
Introduction to Visualization, Washington University in St. Louis   2020
Instructor: Dr. Alvitta Ottley

Awards & Distinctions

Sigma Xi Honor Society   2019
Grace Hopper Celebration Scholar   2018
NSF SCH Workshop Smart Health in the AI and COVID Era Student Awardee   2021

Volunteering & Service

Student Committee Member
Fourth Workshop on Visualization for Communication (VisComm)   2021

Conference Reviewing
IEEE Visualization for Communication (VisComm)   2020

Community
Learning Lodge Tutor, Math 7th grade   2020
Data.org Inclusive Growth and Recovery Challenge Reviewer   2020

University Service
Computer Science & Engineering Graduate Student Senate Representative   2020 - 2022
WashU First Gen Program Mentor   2021 - Present