# **Melanie Bancilhon**

mbancilhon96.github.io

Department of Computer Science & Engineering Washington University in St. Louis 1 Brookings Drive, St. Louis, MO 63130 mbancilhon@wustl.edu

#### Education

### Washington University in St. Louis

2019 -

Ph.D. in Computer Science *Advisor*: Dr. Alvitta Ottley

**Smith College** 2015 - 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

Visual Data Analytics Group, Washington University in St. Louis 2019 -

Principal Investigator: Alvitta Ottley

Investigates the impact of visualization on cognitive mechanisms and decision-making.

Human Computation & Visualization Laboratory, Smith College 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 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
Instructor: Dr. Alvitta Ottley
2020

### **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

tudent 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 -
WashU First Gen Program Mentor	2021 -