

# 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 Submission). 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 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 -

WashU First Gen Program Mentor 2021 -