

# MEIJIA (MAGGIE) WANG

Phone: 480-343-7090

Email: [Maggiew614@gmail.com](mailto:Maggiew614@gmail.com)

[LinkedIn](#)

## EDUCATION

**Arizona State University, Tempe, USA**

*Ph.D. of Statistics*

Aug. 2019 – Dec 2023

**GPA: 4.0/4.0**

**Arizona State University, Tempe, USA**

*M.S. in Statistics*

Aug. 2017 - May 2019

**GPA: 4.0/4.0**

**Southern University of Science and Technology, Shenzhen, China**

*B.S in Financial Mathematics*

Sept. 2013 - June 2017

**GPA: 3.5/4.0**

## SKILLS

**Languages:** R (Proficient); Python (Fluent); C++ (Fluent); Matlab (Fluent); SQL (Intermediate).

**Machine Learning Areas:** Regression, Classification, Causal Inference, Statistical Analysis, Graph Ranking.

**Key Algorithms:** XGBoost, Random Forest, Scikit-learn, BART, Bayesian Causal Forest, Difference-in-differences, Neural Networks, PageRank and *etc.*

## PROFESSIONAL EXPERIENCES

**Data Scientist Intern**

*Google*

May 2022 – Aug 2022

*Economics Team*

- Independently developed the LongBet causal inference model at Google, pioneering the estimation of conditional average treatment effects in causal panel data. This novel approach can provide valuable insights at the individual level for decision-making.

**Software Engineer Intern**

*Meta*

May 2021 – Aug 2021

*Ads Measurement Science*

- Constructed robust data pipelines via SQL to mitigate conversion signal loss across diverse ad encoding strategies. These innovative strategies, validated through rigorous simulation studies, can improve conversion estimation accuracy by 10% to 75% across various scenarios.

## RESEARCH EXPERIENCES

**Local Gaussian Process Extrapolation for BART**

June 2022 – June 2023

- Developed XBART-GP, an innovative predictive model enhancing Bayesian Additive Regression Trees (BART) through localized Gaussian process regression. Authored a research paper and conducted simulation studies to demonstrate the model's efficacy, showcasing its potential for advanced predictive analytics and addressing the positivity violation challenge in causal inference.

**Bayesian Causal Forest for Regression Discontinuity Design**

Jan 2023 – May 2023

- Led the significant implementation of the innovative BCF-RDD approach, substantially enhancing the accuracy of treatment effect estimation for regression discontinuity designs. The project showcased my expertise in adapting complex statistical methodologies into functional code.

## PUBLICATIONS

**M. Wang**, I. Martinez, P. Hahn, “*LongBet: Heterogeneous treatment effect estimation in causal panel data with staggered adoption*”, (work in progress), 2023.

R. Alcantara, **M. Wang**, P. Hahn, H. Lopes, “*A Constrained BART Model for Identifying Heterogeneous Treatment Effects in Regression Discontinuity Designs*”, (work in progress), 2023.

**M. Wang**, J. He, P. Hahn, “*Local Gaussian process extrapolation for BART models with applications to causal inference*”, Journal of Computational and Graphical Statistics (JCGS), 2023.

**M. Wang**, J. He, S. Yarlov, J. Murray, P. Hahn, “*Accelerated Bayesian Additive Regression Trees for Fast Multi-Class Classification*”, (work in progress), 2021.

**M. Wang**, J. Kang, N. Cao, Y. Xia, W. Fan, H. Tong, “*Graph Ranking Auditing: Problem Definition and Fast Solutions*”, IEEE Transactions on Knowledge and Data Engineering (TKDE), 2019.

J. Kang, **M. Wang**, N. Cao, Y. Xia, W. Fan, H. Tong, “*AURORA: Auditing PageRank on Large Graph*”, International Conference on Big Data (ICBD), 2018.