MONA ZHU

monazhu.github.io

EDUCATION

2024 (Expected)
Master of Data Science (In Progress)
University of British Columbia

Relevant Coursework
- ▶ Databases and Data Retrieval
- ▶ Supervised and Unsupervised Learning
- ▶ Statistical Inference and Computation
- ▶ Data Visualization

2020
PhD, Cognitive Psychology
University of Waterloo

- ▶ NSERC Graduate Scholarship (CGSD)
- ▶ Ontario Graduate Scholarship
- ▶ Michael Smith Foreign Studies Award

2016
MA, Cognitive Psychology
University of Waterloo

- ▶ NSERC Graduate Scholarship (CGSM)
- ▶ Ontario Graduate Scholarship
- ▶ President's Graduate Scholarship

2014
BSc, Biopsychology
University of British Columbia

TOOLS & SKILLS

Inferential & Statistical Methods
- ▶ *(G)LM(M) | Survival analysis*

Supervised & Unsupervised ML
- ▶ *Sklearn | PyTorch*
- ▶ *k-means, hierarchical, model-based clustering*

Experiment Design & Hypothesis Testing

Technical Writing

Data Analysis
- ▶ *R | Python*

Data Visualization
- ▶ *ggplot | plotly | altair*

Biometric Tools
- ▶ *VR | Eye-Tracking | GSR*

Graphic Design
- ▶ *Adobe PS | CSP*

RELEVANT EXPERIENCE

Associate, BEworks — 2020 – 2023

Led and supported **15+** consulting projects in both public and private sectors to provide evidence-based recommendations on client challenges
- ▶ Managed and built strong relationships with key project stakeholders, delivering **$400k+** in consulting services
- ▶ Leveraged expertise in behavioural science and the scientific literature to diagnose and understand business challenges
- ▶ Conducted statistical analysis; generated data visualization and insights for **10+** surveys and field experiments
- ▶ Crafted impactful narratives using primary and secondary research and translated findings into solutions and strategic recommendations in **30+** presentations, workshops, and reports

Research Scientist, BAR Lab, UBC — Sept – Nov 2020

- ▶ Developed an approach to examine and validate individual differences in eye and head movement using model-based clustering
- ▶ Created clear documentation of analyses and procedures on GitHub, and delivered key findings using intuitive data visualization

Research Intern, BEworks — Nov 2019 – Mar 2020

- ▶ Conducted extensive scientific literature review to assess self-reported and behavioural predictors of job success across a variety of job roles
- ▶ Constructed and validated behavioural tasks and psychometric scales that predicted job success to help inform hiring decisions

Visiting Researcher, University of Hawai'i — Jan – Apr 2019

- ▶ Performed statistical analysis on behavioural datasets using linear mixed-effects model, spatial statistics, and hierarchical clustering
- ▶ Designed and programmed a VR experiment using UE4 to examine spatial organization and search behaviour

Research Scientist, CaNB Lab, UWaterloo — 2014 – 2020

- ▶ Tailored the use of mixed methodology (e.g., experiments, scale development, archival data, etc) to address novel research questions across 10+ studies in both naturalistic and controlled lab settings
- ▶ Conducted quantitative data analysis (e.g., statistical hypothesis testing, linear and logistic regression, etc) and translated research insights into **5** empirical research papers and **10+** scientific conference presentations
- ▶ Delivered tutorials and workshops to different audiences on programming and statistical methods (e.g., descriptive and inferential statistics, data analysis and cleaning using R, Bayesian statistics, etc)