

Applied researcher with experience in **machine learning & experimentation** in research, commercial, and policy environments. Interested in AI alignment and currently completing BlueDot's AI Safety Fundamentals course.

TECHNICAL SKILLS

- Python (PySpark), AWS, Git, Databricks, SQL, Stata, LaTeX
- Machine learning: deep learning (PyTorch, TensorFlow, Keras, CNN), NLP, unsupervised learning (K-means, clustering, PCA), regression and classification (scikit-learn), processing and visualization (Pandas, NumPy, Matplotlib, Seaborn), distributed data processing
- Industry knowledge: causal inference, experimental design, statistical analysis, econometrics, behavioral economics

QUANTITATIVE RESEARCH EXPERIENCE

Condé Nast | Data Scientist

2022 – present

- Working on DOOM, Condé Nast's large language model (LLM) customized on content data
- Engineered and productionized gradient-boosted tree models for subscription propensity modeling (PySpark, GitHub, and Databricks, AUC=.9), generating 4M+ scores daily for personalized experiences and increased conversion
- Designed and deployed monthly pricing experiments and revenue optimization models for 550K+ subscribers, driving a projected \$1.5M subscription YOY revenue increase for The New Yorker, Vogue, Wired, and Bon Appetit

World Bank | Impact Evaluation Analyst, Consultant

2018 – present

- Co-managed, -designed, and -implemented a \$2.5M experimental research portfolio on governance and civil service
- Collaborated with academic researchers (Columbia, University College London, UPF, GWU) on causal inference design, data collection, questionnaire design, pre-analysis plans, and result dissemination
- Coauthored and contributed to technical resources on experimentation, reproducibility, causal inference best practices, and gender gaps in education and the workforce
- Designed, executed, and evaluated randomized experiments (Python, MTurk) to quantify the causal impact of hiring practices on diversity and inclusion

University of Wisconsin | Research Project Manager

2016 – 2017

- Developed experimental groundwork for a research partnership (Berkeley, UW Madison, Government of Paraguay) aimed to decrease corruption and increase state capacity
- Built and analyzed a novel dataset of Paraguayan imports to identify predictive factors of illicit Customs practices

Innovations for Poverty Action | Field Research Associate

2015 – 2016

- Oversaw end-to-end experimental research processes – design, data collection, data quality checks, cleaning, analysis, and report-writing – for impact evaluations on education, financial inclusion, and local governance in collaboration with academics (Berkeley, Princeton) and stakeholders (Government of Peru)

EDUCATION

European University Institute - Ph.D. Economics (withdrew in good standing for professional pursuits)

2021-2023

Barcelona Graduate School of Economics - M.Sc. Economics

2017-2018

University of Wisconsin - B.Sc. Applied Economics, Graduated with Distinction

2011-2015

PUBLICATIONS

Vaillant, J, et al. 2022. *Closing Gaps, Increasing Opportunities: Women's Economic Empowerment*. World Bank Group.
World Bank. 2021. *Europe and Central Asia Economic Update, Spring 2021: Data, Digitalization, and Governance*.
Schuster, C, et al. 2020. "Responding to COVID-19 Through Surveys of Public Servants." *Public Administration Review*.
Buehren, N, et al. 2019. *Ethiopia Gender Diagnostic Report: Priorities for Promoting Equity*. World Bank Group.

ADDITIONAL EXPERIENCE

London School of Tropical Hygiene and Medicine (The MRC Unit) - Pro Bono Health Researcher

2019

Legal Services Corporation - Research Analyst

2018

Center for Media and Democracy - Research and Policy Intern

2014

Food & Water Watch - Research and Policy Intern

2014

Wisconsin State Senate - Legislative Intern

2013

Institute for Food and Development Policy - Research Intern

2013