Alex Schell

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Skills

Machine Learning: Fluent with OLS, GLMs, GAMs and XGBoost on i.i.d., time series and panel data. Intermediate with clustering, spatial data and Bayesian methods.

ML Ops: Deployed models as containerized on-line inference APIs or batch scripts / SQL and built automated model retraining pipelines (R/Plumber, Flask, Heroku, Docker)

Experiments: design, power calculations, hypothesis testing, causal inference, root cause analysis

Tools: R, Python, SQL, Hive • Git, Bash • Tableau, Chartio, Shiny • GCP, AWS

Professional Experience

Meta Platforms • Data Scientist • *2022-04 - 2023-09*

- Developed and implemented operational success metrics for experiments on Ads Manager UX/UI
- Supported a multi-year ad campaign objective migration project with test design, root cause analysis of metric regressions, and forecasting. PM & EM credited my analyses with influencing the project roadmap, clearing rollout blockers, and averting a rollback request based on flawed analysis.

LendingPoint • Lead Data Scientist • *2021-06 - 2022-03*

- Led a team building credit risk models; focus on new models for product launches, market expansion
- Wrote a Java library for XGBoost inference to replace an eng-intensive legacy model deployment process. Sped up model deployment time by 5x and made it feasible to auto-deploy retrained models.

Divvy Homes • Data Scientist • *2019-08 - 2021-06*

- Built a lead scoring model that Sales used to prioritize outbound calls. Evaluated with an A/B test and heterogeneous treatment effect estimation, finding a 10% conversion lift.
- Redesigned home price inference service to avoid an external data bottleneck during record-high housing market turnover. Raised effective model coverage from 30% to 90%.
- Created a personalization framework for the underwriting user journey, combining multiple ML models to predict expected lead value conditional on different flows

Prosper Marketplace • Senior Risk Analyst • *2018-05 - 2019-08*

- Used A/B testing, ML models and alternative data sources to improve the accuracy of loan verification targeting, driving greater platform growth and zero-touch loan approvals
- Built a hidden Markov model to detect third-party API outages in real time

US Bank • Quantitative Model Analyst, AVP • *2015-05 - 2018-05*

- Developed conditional forecasting models for a dozen banking products for economic stress testing, using time series methods (OLS, ARIMA, state space models)
- Improved loan forecasting by combining time series and panel data models with granular financial models. Extended the approach and drove its adoption by peers and consumer lending team.

Education

M.A., Applied Economics University of Cincinnati • 2015 • GPA 3.9

B.S., Biological Sciences University of Cincinnati • 2013 • GPA 3.7