Michael Bigelow

(801) 550-3981
michaeljohnbigelow@gmail.com
LinkedIn: michaelbigelow

Highlighted Work

Nursa (2022-present-- a Series-B funded two-sided marketplace app connecting clinicians to jobs):

Manager, Data Science: April 2023 – present

- partnered with Engineering Managers, Product Managers/Directors, and Principal Data Scientist to frame complex problems—both mathematically and within the business context—in areas such as incentivization of desired user behaviors, dynamic pricing, and job feed/ recommendation
- partnered with Strategy teams to understand drivers of user cancellation
- worked closely with Head of Data and staff economist to develop pricing (bill & pay) strategies, interfacing with SalesOps and Engineering teams to drive execution
- spearheaded unification of company A/B testing efforts under D.S. to better coordinate experimentation
- enhanced personalization of email campaigns through cross-channel marketing platform's API calls to GCP-deployed models for on-demand, up-to-date personalization at time of email send
- hired and oversaw team of three data scientists (one senior, two junior) in hybrid work setting
    - established team-wide best practices, and managing development through GitHub and Jira
    - led weekly data science stand-up/ strategy meeting to prioritize and coordinate efforts across the team and collaborate effectively with off-site colleagues
    - mentored Junior Data Scientists in business, statistics, and code development
- created and maintained Nursa Data Science blog as a consistent, company-facing output for Data Science Team's quantitative research supporting major efforts such as dynamic pricing, as well as for displaying the results of ad hoc research requests from other departments

Data Scientist: July 2022 – March 2023

- implemented working Agent-Based Model proof of concept using Python (Mesa), creating base class definitions of app users and their salient features, decisions, and actions, and history-matching their resultant behavior
- worked with Marketing on construction of optimal user groups for promotions
- worked with Product on research preceding discussions of various feature additions and changes
- general ad-hoc data requests, statistical questions, and input on matters relating to pricing and product

Dominion Energy (2020-2022)

Engineering Technical Specialist II (Data Scientist)
(Wexpro—an upstream oil & gas team in tight gas sands): July 2021 – June 2022

- researched, implemented, trained, tested, and used ConvLSTM deep learning model for inference of synthetic dipole sonic well logs from triple combo logs (similar to Pham et al. 2020), helping to incorporate model output into engineering and geology workflows
- as sole data science subject matter expert on Wexpro team, created and led weekly data science forum, providing direction, training, and mentorship to engineers and geoscientists on statistical learning theory, model selection, RStudio, and object-oriented Python applied to statistics and predictive modeling

Data Scientist (Intern, Wexpro): June 2020 – July 2021

developed visualization webapp/ interactive drill rig control parameter interface for improvement of rate of penetration by drilling engineers (Random Forests, Gaussian Mixture Models, R Shiny)

Education

MST, Data Science | **MM**, Jazz Studies (saxophone) | **BS**, Mathematics (physics minor)
University of Utah

Relevant Skills

neural networks, A/B testing, machine learning, SQL, Python data stack, R, Keras, PyTorch, GitHub & Jira administration, AWS, GCP, Iterable, Split.io, leading and developing teams, simulation/ agent-based modeling

Additional Work Experience

Intermountain Healthcare (2019-2020)

Data Science Intern: December 2019 – May 2020
> predicting insurance claims by patient comorbidity

Data Architect Intern: June 2019 – November 2019
> data integration and ETL development

Freelance Musician (2014-2019)

> corporate event bandleader, saxophone performer (resume upon request), jazz record label marketer and business strategist, composer/arranger

Freelance Mathematics Tutor (2014-2019)

> founded Wasatch Math Tutors; filmed and edited content marketing to drive customer acquisition