

Everett Dutton

<https://www.linkedin.com/in/everett-dutton/>

Work Experience:

Senior Data Analyst, Ohio Children's Alliance, September 2024 – Present

- Drive data strategy for Ohio's largest child welfare nonprofit.
- Implement data strategy through process improvement, analyses, and modeling.
- Translate business requirements into technical analytics solutions.

Operations Research Analyst, Marathon Petroleum, June 2020 – September 2024, with 6 month sabbatical

- Led QA testing, SQL data ingestion, and Tableau visualization of discrete event simulation and mixed integer optimization models to reduce marine shipping costs and pollution.
 - Operational savings are over **\$10 million per year**, via optimized routing and scheduling.
- Co-developed probabilistic approach to determine proper marine fleet sizing with a simple Excel tool.
 - Combined with the above, this tool gave backing to leadership to cut fleet size from 30% oversized to 3% undersized (**\$50+ million one-time savings**).
- Led creation, cloud deployment, and dashboard development of a new forecasting model. This model is a general time series analysis framework which has also been applied to estimating pricing, market capture, and holiday effects on sales.
 - This model is utilized to estimate finished product demand across more than **50 locations and 10 classes** of trade, and is on average **4% more accurate** than the old model.
- Co-developed geospatial gas station scouting system with open-source and internal data to predict sales volumes and station quality remotely, using supervised and unsupervised machine learning methods.
 - In one case, this model was used to **remotely examine 20 sites** for potential rebranding in an afternoon - this would have easily taken more than a week if done manually.
- Discovered error in vendor's credit card interchange fee methodology on signed contract. Successfully presented technical findings (regression and hypothesis testing) to non-technical internal and external stakeholders, resulting in a point-forward amendment to the contract.
 - Resulted in a **\$1.1 million savings** for the remainder of the contract.

Owner, Dutton Solutions LLC, June 2023 – Present

- Freelance decision science consultant. Automate planning tasks, improve decision quality, reduce costs, and increase revenue using technologies such as machine learning, optimization, simulation, and data visualization.

Education and Certifications:

M.S. Industrial Engineering, The Ohio State University

- Operations Research (Applied Math) Focus, Magna Cum Laude

B.S. Industrial Engineering, The Ohio State University

- Manufacturing Focus, Cum Laude

Certified Analytics Professional (CAP), INFORMS

- Highly proficient in business problem framing, analytics problem framing, data gathering, methodology selection, model building, deployment, and lifecycle management.

Azure Data Scientist Associate, Microsoft

- Train, evaluate, and deploy machine learning models in the cloud.