

# Taylor Bosier

Data Science Professional

(402) 984-9277 • bosier83@gmail.com • <https://github.com/tbosier>

---

Dynamic and results-driven Data Scientist with nearly 5 years of experience in logistics and transportation analytics. I have experience developing data-driven solutions that drive operational efficiency and cost savings. I have successfully implemented Bayesian Inference, machine learning models, and optimization methods, enhancing business decision-making and operational agility.

## Professional Experience

---

### Data Scientist II

*Sept 2021 – Present*

#### Knight-Swift Transportation

*Phoenix, AZ*

- Promoted to Data Scientist II Sept 2023
- Developed machine learning and optimization models to optimize pricing strategies based on historical data and customer behavior, resulting in improved price acceptance rates.
- Developed an early-warning detection model for driver safety, identifying 40+ drivers weekly in need of remediation, utilizing machine learning, python, and SQL. Deployed from Gitlab to Azure.
- Applied Bayesian inference for A/B testing and hypothesis testing to validate business strategies and enhance decision-making processes.
- Optimized a driver retention model, leading to a 20% increase in F1-score.
- Reengineered and enhanced a scheduling optimization model for driver planning, resulting in an increase from 20 to 85% total drivers planned in a terminal.
- Conducted frequency-severity modeling for risk assessment for insurance purchasing.

### Business Analyst

*June 2019 – Sept 2021*

#### Chain Link Services

- Found optimal warehouse locations and number of required warehouses utilizing k-means clustering algorithms and various statistical analyses, reducing inventory costs and stockouts
- Reduced inventory space and holding costs by utilizing a Facebook Prophet model to predict inventory demand
- Increased warehouse pick speeds by utilizing an a-priori model to re-structure warehouse layout and implemented aisle traveling heuristic to pack pick orders together to speed up picks
- Utilized a Safety Stock ( $Z\text{-score} * \text{sd of lead time} * \text{Average Demand}$ ) algorithm to set inventory levels required at offsite warehouse locations, reducing physical inventory space and lowering purchase cost

## Technical Skills and Competencies

---

- Python – PyMC, scikit-learn, xgboost, catboost, Gurobi, SimPy, SciPy, Fitter
- Optimization Solver – Gurobi
- SQL – Microsoft SQL Server, DB2, Hadoop, Elasticsearch
- Cloud – Azure Machine Learning, some Azure DataBricks, Cloudera Data Science Workbench
- Data Visualization – Tableau, Matplotlib
- Version Control – Git

## Education

---

### Georgia Institute of Technology

Online

#### Master of Science in Analytics – Computational

Est: May 2025

### New Mexico State University

Las Cruces, NM

#### Master of Science in Mathematics

*May 2018*

### New Mexico State University

Las Cruces, NM

#### Bachelor of Science in Mathematics

*May 2016*