

# Annette Gisella

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## EDUCATION

**Georgia Institute of Technology**, Atlanta, GA  
Master of Science in Analytics  
Analytical Tools & Business Analytics Track

**Dec 2025**  
GPA: 4.00/4.00

**Georgia Institute of Technology**, Atlanta, GA  
Bachelor of Science in Industrial Engineering | Minor in Computing and Intelligence  
2024 Alpha Pi Mu Academic Excellence Awardee

**May 2024**  
GPA: 4.00/4.00

## SKILLS

- **Programming Languages:** Python (NumPy, Pandas, Scikit-learn), R, SQL, Java, C
- **Optimization & Simulation:** Gurobi, CPLEX OPL, Simio, SimPy, PuLP
- **Data Visualization:** Matplotlib, Plotly, Tableau, ggplot2, D3.js
- **Data Analysis:** Regression Analysis (Linear, Logistic, ARIMA), Clustering (K-means, Hierarchical, DBSCAN), Hypothesis Testing, Neural Networks, SVM, KNN, PCA
- **Other Skills:** Microsoft Excel, WordPress, HTML, LaTeX, Lean Six Sigma Green Belt, Adobe Photoshop

## EXPERIENCE

### Research Assistant – Socially Optimal Transportation and Logistics

**Jan 2024 – May 2025**

Georgia Institute of Technology | Atlanta, GA

- Managed two project teams, leading regular check-ins and driving timely progress toward objectives
- Applied data analysis and hypothesis testing in R to quantify the effect of cognitive biases on adoption of sidewalk autonomous delivery robots
- Automated input variation and results compilation for disaster relief logistics optimization models in Python and Gurobi, reducing setup and post-processing time by 75%
- Awarded the Minority Issues Forum Scholarship to attend INFORMS, learning from and interacting with experts in the field

### Undergraduate Teaching Assistant – Stochastic Systems, Linear Programming

**May 2022 – Dec 2023**

Georgia Institute of Technology | Atlanta, GA

- Recognized as the 2023 Undergraduate TA of the Year in Industrial Engineering, selected from over 30 TAs
- Organized weekly homework assignments, led exam review sessions, and delivered graded feedback for a total of 137 students
- Communicated course concepts clearly and effectively to students, resulting in a 93% student satisfaction rate

## PROJECTS

### Predictive Insights for Work Order Compliance

**Aug 2025 – Dec 2025**

Enterprise AI Consulting Firm | Atlanta, GA

- Built and evaluated Python-based models for early detection of work-order compliance risk, comparing logistic regression and XGBoost with feature selection, hyperparameter tuning, and interpretation
- Transformed and merged 20K+ work orders, conducting correlation analysis to uncover compliance patterns
- Uncovered vendor-driven compliance risks and communicated evidence-based recommendations to strengthen vendor process controls

### Real-Time Outage Detection using Customer Interactions

**Jan 2025 – Jan 2025**

Cox Communications | Atlanta, GA

- Collaborated with three teammates to achieve 3rd place in a two-week datathon by detecting periods of unusually high customer interaction using seasonal trend decomposition (LOESS) and isolation forests
- Performed exploratory data analysis and cleaning on two datasets totaling over 11 million records
- Assisted in training and testing a random forest model to predict outages in real time with 92% accuracy

### Inventory Optimization Consulting (Capstone Project)

**Jan 2024 – May 2024**

Georgia Power GRID Investment Program | Atlanta, GA

- Led development of a Python application to detect inventory inefficiencies and data discrepancies, revealing \$800K in under-utilized assets and enabling improved decision-making
- Contributed to a logistic regression model predicting over-purchased SKUs, achieving 95% accuracy and 92% precision
- Designed, built, and validated a simulation-based optimization model to formulate and test inventory purchasing strategies, demonstrating a simulated 75% reduction in excess inventory
- Team selected as Best Senior Design Project of Spring 2024 for innovation and technical execution