SPENCER PRENTISS

DATA SCIENTIST

We've all been there, in a group project where 2 people wind up doing most of the work. I'm one of the 2.

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SKILLS

Programming Languages: Python (Pandas, Numpy, Scikit-Learn, Beautiful Soup), R, SQL, Java, SAS

Tools: Excel, Jupyter Notebooks, GitHub

Data Visualization: Tableau, Python (Matplotlib, Plotly, Dash)

Machine Learning and AI: NLP (Sentiment Analysis, Topic Modeling, Text Classification), Data Mining, Supervised Learning, Unsupervised Learning

EDUCATION

Purdue University 08/2019-12/2022

B.S. in Data Science and B.S. in Applied Statistics

Relevant Coursework: Data Mining and Machine Learning, Relational Databases, Intro to AI, Large Scale Data Analysis, Applied Regression Analysis

PROFESIONAL EXPERIENCE

Data Analyst Consultant 01/2021-Present

Leveraged, expertise in data analysis, visualization, and innovative metric development, to contribute to diverse organizations, enhancing their strategic decision-making and driving impactful results.

- Political Organization - Project: Campaign Strategy Optimization with Data Analysis

- Accomplished optimization of targeted voter outreach for a political campaign by analyzing Maine polling data and identifying potential peel-off voters in key precincts.
- Achieved a 99% reduction in manual data labeling effort by creating an ensemble text classification model using Random Forest, Gradient Boosting, and XGBoost classifiers.
- Executed the development of a Python tool for model lift calculation, optimizing predictive performance, and supporting marketing experiments.

- Purdue Baseball - Project: Elevating Athletic Training with Data Analysis and Tableau

- Liaised with Purdue Baseball's Assistant Director of Strength and Conditioning to develop two Tableau dashboards.
- Engineered dashboards for real-time tracking of individual and team weight room performance and ongoing athletic workload metrics.
- Empowered coaches and more than 40 athletes to make data-driven decisions, resulting in the establishment of an internship program.

- Grand Ledge High School Football - Project: Data-Driven Strategies for High School Football Success

- Elevated high school football team's win and one-possession game percentages by 7% and 13.4% respectively, through Python and Monte Carlo simulations.
- Created a real-time Tableau app enabling coaches to, within 5 seconds, predict and adapt to opponent plays, optimizing coaching responsiveness.
- Work published in Delen, D., Shadra, R., and Turban, E. "Business Intelligence, Analytics, Data Science, and AI: A Managerial Perspective 5th ed.": 8-12.

Teaching Assistant - Purdue University-West Lafayette, IN

07/2021-12/2022

GPA: 3.68

Engaged as a Teaching Assistant to educate and support students in programming and technical skills, elevated student comprehension and performance resulting in improved understanding and higher test scores.

- Taught Java, Python, and GitHub to 200+ students, collaborating with 20 TAs to address inquiries, prepare study materials, and conduct exams.
- Developed Python exercises teaching fundamental programming, data structures, and web scraping concepts.

PERSONAL PROJECTS

NLP-Powered Judicial Opinion Analysis

Led a 6-person team in investigating judicial opinion complexities, overseeing data scraping, cleaning, and analysis of 10GB of data from 12 appellate courts.

- Employed natural language processing (NLP) methodologies, incorporating sentiment analysis, lemmatization, CountVectorizer, and LDA topic
 modeling to extract insightful metrics related to complexity, polarity, and subjectivity.
- Collaborated with a professor to integrate our findings and methodology into ongoing research initiatives.

Capstone Project Mentor | Auburn University Business Analytics Capstone Team

Mentored a group of students at Auburn by guiding project management, facilitating effective communication, and leading productive brainstorming sessions, during weekly meetings.

- Provided insights into advanced modeling (Logistic Regression) and visualization techniques (Tableau, including heat maps and Snakey diagrams).
- Led the team to a 3rd-place finish, securing a \$700 prize.