James Holt Ph.D.

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SUMMARY

Solution oriented, self-motivated data scientist with close to a decade of experience between industry and academia. Crafts unique data-driven solutions with passion and attention to detail, enabled by curious nature, and highly technical skillset. Consistent self-learner reads articles to stay up to date with latest advances. Collaborates effectively across multi-functional teams, possesses keen sense of ownership, business focus, project management, and mentorship skills. Engaging communicator of technical concepts to any ability level, using excellent data presentation and storytelling skills.

INDUSTRY EXPERIENCE

Data Scientist - Coyote Logistics (UPS) - Remote, US

June 2022 - Sept 2023

- Led team responsible for predicting live market costs of truck loads, multi-model machine learning model and live API service, which helped sales teams generate \$2.5 Billion revenue annually.
- Expanded the model service to cover new Canadian lanes, projected to increase revenue by more than 20%.
- Prototyped and deployed a new add-on pricing model to achieve ~95% (*up from 90%*) business-wide pricing coverage of truck equipment types.

Data Scientist - Bayer, Crop Sciences - Remote, US

Oct. 2021 - June 2022

- Headed research and development to improve (and propose new) tree-based machine learning models to predict corn seed yield using historic growth, weather, and text-mined (NLP) data.
- Created an automated ML model testing and performance benchmarking framework, in Python, to improve team experimenting efficiency, cadence, and capabilities.
- Using framework, created random forest model for APAC region that improved seed yield prediction reliability from 50% MAPE to 85% MAPE.

TECHNICAL SKILLS

Programming Languages - Python (expert), SQL (intermediate), shell (working), HTML/CSS (working).

Data Science Software – Statistical (e.g., NumPy, SciPy, Pandas, Polars, Excel), Big Data (e.g., Spark/PySpark), Machine Learning (e.g., Sci-Kit Learn, H2O.ai, LightGBM, Pytorch, Azure ML), Visualization (e.g., Matplotlib, Seaborn, Plotly/Dash, Streamlit, Power Bl).

Infrastructure/Cloud – GitHub (e.g., version control, Actions, Copilot), Databricks, Jupyter (e.g., Lab, Notebooks), MLFlow, Azure (e.g., Blob Storage, Kubernetes, Pipelines, Artifacts), Docker, AWS (e.g., S3), GCP (e.g., Big Query), Apache (e.g., Airflow).

Machine Learning – Regression (*e.g., OLS, Random Forest, GBMs*), Classification (*e.g., Logistic Regression*) Clustering/Segmentation (*e.g., K-Means*), Decomposition Analysis (*e.g., PCA*), Time-Series Analysis and Forecasting (*e.g., AR, ARIMA, etc.*), Digital Signal Processing (*e.g., signal decomposition, time-frequency analysis*), Hyper-parameter Tuning, Statistical/Physics-based Modeling, Statistical Analysis, Decision/Risk Analysis, Hypothesis Testing, Experiment Design, Deep Learning.

STRENGTHS

Project Management – Planning (*e.g., Jira / Azure DevOps*), ownership, daily stand-up, book-keeping (*e.g., Excel, Word, OneNote*). Collaborative tools (*e.g., Zoom, Slack, MS Teams*).

Communication – Public speaking and communication (e.g., presented at several international conferences). Technical report writing (e.g., published three papers in peer-review journals).

Mentorship – Expertise and highly experienced in teaching/mentoring colleagues/students over project life cycles.

EDUCATION

Oct. 2019 – Ph.D., Geophysics – University of Liverpool – Liverpool, UK

Oct. 2016 – MRes., Decision Making Under Risk & Uncertainty – University of Liverpool – Liverpool, UK

July 2015 – BSc. (Hons.), Geophysics – University of Liverpool – Liverpool, UK