Jordan Bell

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Data Scientist

Experienced Data Scientist with a Master of Science in Mathematics, specializing in geospatial and time series data analysis and operational SQL data pipeline development. Exceptional at producing top-quality visualizations, descriptive statistics, supervised learning predictive models, and time series analysis and forecasting. Solid command line and systems administration experience.

Key Skills

- Data cleaning and engineering
- SQL data pipeline development
- Data modeling
- ETL
- Classical time series analysis (SARIMAX)
- Feature engineering for time series machine learning
- Geospatial analysis
- Data documentation and stewardship
- Technical training (developing and delivering)

Languages

- SQL (MySQL, PostgreSQL, Hive, Spark, BigQuery, Oracle, Teradata)
- Python
- Bash scripting and CLI tools (awk and sed for text processing with regular expressions, gnuplot for data plotting, ImageMagick for image manipulation, ffmpeg for video editing, GDAL for GIS manipulation, transformation and visualization)
- R, SAS, Excel, PowerBI DAX

Software and Platforms

Software	Platforms
Hitachi Pentaho	Amazon S3
Talend	Microsoft Azure
KNIME	Google Cloud Platform
PowerBI	Databricks
Tableau	Cloudera
MicroStrategy	Atlassian Bitbucket, Confluence, Jira
ArcGIS, Mapbox, CARTO	Google Analytics
Excel/Google Sheets	Google Analytics
Microsoft Teams	Teradata Vantage
SSH and PGP	Datadog
	Elastic Observability

Python Libraries Working Experience

- **Data Manipulation**: NumPy, pandas, PySpark, Dask
- **Visualization**: Matplotlib, Seaborn, Graphviz
- **Regression, classification and clustering**: sklearn, scipy.spatial
- **Deep learning**: Keras, TensorFlow, PyTorch

- **Time series analysis**: statsmodels.tsa, sktime, pmdarima
- **Text processing**: re, spaCy, NLTK, Gensim, sklearn.preprocessing, sklearn.feature_extraction, automata-lib
- **Bayesian estimation**: ArviZ, PyMC3, Theano
- **Geospatial data**: GeoPandas, Rasterio, xarray, h3, Cartopy
- **Symbolic mathematics**: SymPy

Professional Experience

Canadian Tire, Toronto.
Data Science Associate, June 2022 - August 2023

- Blended pure data science methods with business insights to satisfy stakeholders.
- Developed store similarity metrics.
- Initiated a pipeline from Google Analytics.
- Built a data pipeline and dashboard for store participation in deals using SQL.

Consilium Crypto, Toronto.
Data Science Intern, January 2019 - April 2019

- Loaded, cleaned, and engineered features for time series data on cryptocurrency.
- Built and tested predictive models for price and volume.

Jordan Bell Tutoring, Toronto.
Mathematics Tutor, January 2021 - June 2022

University of Toronto, Toronto.
Mathematics Course Instructor, April 2013 - April 2017

- Mentored students and developed course materials.

Education

Graduate Certificate, Analytics for Business Decision Making (SAS based program), George Brown College, Toronto

Master of Science, Department of Mathematics, University of Toronto, Toronto

Bachelor of Mathematics, Mathematics, Carleton University, Ottawa. University Medal in Mathematics

Selected Personal Projects

USCG NAIS Data Project

- Analyzed AIS data to estimate shipping activity.
- Created visualizations for maritime traffic data.

Canada 2021 Census by Forward Sortation Areas

- Conducted clustering and regression analyses on census data.

Selected Online Courses

- Teradata - Intro to Advanced SQL Engine 17.10
- Datadog Fundamentals I
- Talend Data Fabric Explorer
- Containers & Kubernetes Essentials
- Excel Skills for Data Analytics and Visualization by Macquarie University
- Microsoft Azure Data Fundamentals DP-900 Exam Prep by Microsoft
- AWS Fundamentals by Amazon Web Services
- Google Data Analytics Certificate
- Open Source Software Development, Linux and Git Specialization, by The Linux Foundation

Selected Publications

Bell, Jordan, and Viktor Blåsjö. "Pietro Mengoli's 1650 Proof that the Harmonic Series Diverges." Mathematics Magazine 91, no. 5 (2018): 341–47. https://doi.org/10.1080/0025570X.2018.1506656. 2019 recipient of Carl B. Allendoerfer Award, MAA

Andrews, George E., and Bell, Jordan. "Euler's Pentagonal Number Theorem and the Rogers-Fine Identity." Annals of Combinatorics, 2012. https://doi.org/10.1007/s00026-012-0139-4

Bell, Jordan. "A Summary of Euler's Work on the Pentagonal Number Theorem." Archive for History of Exact Sciences 64, no. 3 (2010): 301–73. https://doi.org/10.1007/s00407-010-0057-y

Bell, Jordan, and Brett Stevens. "A Survey of Known Results and Research Areas for n-Queens." Discrete Mathematics 309, no. 1 (2009): 1–31. https://doi.org/10.1016/j.disc.2007.12.043 (Cited by 250+ publications.)