Ian Dover

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Skills

Technical	Python, Azure Databricks, Databricks Workflows, Git, GitHub Actions, Unit/Integration/Smoke/Regression/Snapshot/Performance/Property-Based testing, Docker Dev Containers in VS Code, Snowflake, SQL, PySpark, Pandas, NumPy, scikit-learn, PyTorch, Seaborn, Matplotlib, Azure Synapse, Azure ML Studio, VS Code, Mathematics, Statistics, Jira, Confluence, Excel, Power BI

Employment History

2023 – · · ·

Fortegra Financial, Senior Data Analyst (Data Science Team)

- Consistently submitted an average of one pull request daily to the development branch of critical projects on GitHub, using a tree-trunk branching strategy.
- Managed 3 - 5 Jira story points weekly, employing scrum/agile methodologies including daily stand-ups, sprint planning, and retrospectives.
- Developed a claims triangle automation application for Actuaries, reducing manual hours significantly by producing hundreds of triangles within minutes.
- Engineered the claims triangle tool using Databricks, integrated with GitHub Actions for CI/CD across three environments: production, user acceptance testing, and development. Utilized ServiceNow for front-end and Flask deployed on Azure Functions.
- Created and maintained a comprehensive data pipeline that processes insurance book data, delivering actionable insights and rerate suggestions that projected over $1 million in loss savings per program across more than 15 programs - projecting 40 programs by EoY.
- Scoped causal inference techniques to leverage historical on-leveling data for predicting customer churn and influx using a counterfactual and potential outcomes framework.
- Employed software development best practices, including type hints, docstrings, modular design, code reviews, attention to design patterns, and comprehensive testing (unit, integration, snapshot, property-based, performance, and multi-stage acceptance testing via GitHub Actions).
- Presented rerate suggestions to VP-level employees and underwriters at Fortegra.
- Developed a robust data validation framework utilizing Python's Cerberus and concurrency packages and Snowflake, designed to efficiently validate large dataframes exceeding 10 million rows.

2020 – 2023

FedEx Services, Data Analyst (R&D Team)   Awarded 2 Bravo Zulus

- Developed a customer categorization clustering model aimed at enhancing collections strategies based on payment behaviors.
- Executed advanced analytics and predictive modeling on external datasets for customer credit assessments, establishing robust pipelines that rivaled traditional credit risk models.
- Achieved model accuracies of 80% and 90% for positive and negative classifications respectively (AUC = 0.9), significantly reducing potential losses from delinquent accounts.
- Managed data pipelines using SQL and PySpark, handling complex data operations efficiently.

Education

2020 – 2024   **M.Sc. Computer Science - Concentration in Machine Learning**
Georgia Institute of Technology
Classes: **(1)** Reinforcement Learning, **(2)** Educational Technology, **(3)** AI for Robotics, **(4)** Computer Vision, **(5)** Machine Learning for Trading, **(6)** Data and Visual Analytics, **(7)** Topics on High Dimensional Data Analytics, **(8)** Deep Learning, **(9)** Machine Learning, **(10)** Artificial Intelligence, **(11)** Graduate Algorithms

2016 – 2020   **B.Sc. Electrical Engineering**
Christian Brothers University

Research Publications

Hussin K. Ragb, Ian T. Dover, Redha Ali, (2020). Deep Convolutional Neural Network Ensemble for Improved Malaria Parasite Detection. IEEE Xplore, AIPR.

Hussin K. Ragb, Ian T. Dover, Redha Ali, (2020). Fused Deep Convolutional Neural Network for Precision Diagnosis of COVID-19 Using Chest X-Ray Images. arxiv.

Ian T. Dover, Jawad Almaatouk, Chad Baker, John Ventura (2020). Data-Over-Sound Robot. IESTOC.

Certifications

2023 – 2024   **A.I. Professional Program**
Stanford School of Engineering
Classes: Natural Language Processing with Deep Learning (XCS224N-015)

2022   **Post Graduate Program in Data Science and Business Analytics (8 Months)**
UT Austin - Texas McCombs School of Business