Hussein Mazloum

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Summary

Test Technician skilled in optimizing system performance through advanced testing and troubleshooting. Experienced in Python and data analysis, with a portfolio focused on impactful, business-driven projects. Pursuing a master's in Data Science and seeking to transition into software engineering or data science to deliver data-driven solutions.

Education

University of Michigan Ann Arbor, MI
Master of Science (MS) in Data Science *Expected May 2026*

Wayne State University Detroit, MI
Bachelor of Science (BS) in Biological Science

Experience

Latitude AI Dearborn, MI
Test Technician *February 2023 – Present*

- Improved system validation by developing and refining testing methods, resulting in a 20% increase in detection of system issues.
- Resolved critical software and hardware issues, enhancing system stability and reducing error rates by 15%.
- Executed comprehensive tests on various hardware and software components, ensuring 100% compliance with safety and performance standards.
- Maintained up-to-date test documentation, supporting more efficient testing procedures and reducing documentation errors by 25%.
- Drafted detailed release notes that clarified bug fixes and new features, streamlining software releases and improving stakeholder communication.

Argo AI Dearborn, MI
Test Technician, Autonomous Vehicle Test Specialist *January 2019 – February 2023*

- Operated autonomous vehicles with strict adherence to safety protocols, ensuring zero safety incidents.
- Monitored vehicle software performance, providing feedback that led to a 15% improvement in software stability.
- Documented critical errors and events, facilitating targeted improvements in software and system design, reducing error rates by 25%.
- Collaborated with engineering teams to meet vehicle test requirements, contributing to successful project outcomes and advancements in autonomous technology.

Projects

Predicting Customer Loyalty Using Machine Learning | *Python*, *Pandas*, *Scikit-learn*, *Machine Learning*

- Compiled key customer metrics of a grocery retailer to predict missing customer loyalty scores using machine learning, enabling more accurate customer tracking and targeted communications.
- Tested three regression models: Linear Regression, Decision Tree, and Random Forest.
- Selected Random Forest for its highest predictive accuracy with an Adjusted R-Squared of 0.955 on the test set and 0.925 on 4-fold cross-validation.

Quantifying Sales Uplift With Causal Impact Analysis | *Python*, *pycausalimpact*

- Analyzed the impact of a grocery retailer's Delivery Club membership campaign on customer spending using pycausalimpact.
- Built a control group and counterfactual scenario using non-member customers to quantify the uplift in spending post-membership.
- Found a 41.1% sales uplift for customers joining the club, with a 95% confidence level, indicating the success of the campaign.

Technical Skills

Languages: Python, SQL, R, HTML, CSS, JavaScript
Technologies & Tools: Pandas, NumPy, Scikit-Learn, Jupyter, Matplotlib, Seaborn, Tableau, Docker, AWS, Git, Jira, Linux
Concepts: Data Analysis, Machine Learning, Deep Learning, Natural Language Processing, A/B Testing, Cloud Computing