JOHN JOSEPH ZAGARIAH DANIEL

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Experienced Software Engineer specializing in Data Visualization and Management with Splunk and Power BI. Currently advancing my knowledge through a Master's in Computer Science focused on Applied AI at the University of Ottawa. Seeking to secure a Co-Op position to utilize my expertise in machine learning and data analytics, contributing to transformative projects and solutions.

EDUCATION

University of Ottawa — Ontario, Canada
Master of Computer Science, Applied Artificial Intelligence — Jan 2024 – Present
Cumulative GPA: 9.33/10.00

Panimalar Engineering College, Anna University — Chennai, Tamil Nadu, India
Bachelor of Engineering, Computer Science and Engineering — Jun 2017 – Aug 2021
Cumulative GPA: 8.75 /10.00

EXPERIENCE

Accenture Solution Pvt. Ltd — Chennai, Tamil Nadu, India
Software Engineer, Data Analyst — Aug 2021 – Dec 2023

- Developed and deployed a Splunk application focused on cost optimization and vulnerability analysis by monitoring Azure Services, resulting in a 25% improvement in resource allocation.
- Spearheaded the development and deployment of an application in Splunk for resource assignment and analysis in operational readiness testing.
- Designed and deployed custom REST endpoints in Splunk to address specific business needs, extending platform capabilities and supporting datadriven decision making.
- Automated manual processes using Python and shell scripting, reducing operational time by 30% and streamlining workflow.
- Created a custom alert action to send system critical alerts to Microsoft Teams channels, enabling managers and stakeholders to respond quickly.
- Utilized Splunk and Power BI to build interactive dashboards and generate detailed reports, providing actionable insights for infrastructure monitoring and alert management.
- Collaborated crossfunctionally with system administrators and network engineers to troubleshoot issues and enhance Splunk performance, ensuring reliable system operations.
- Successfully onboarded multiple servers via Universal Forwarders (UFs) to the Splunk environment, preparing incoming data for efficient searching and analysis.
- Performed regular administrative tasks, including user management, role assignment, and access control, to ensure data security and proper system utilization.

SKILLS

- **Programming Languages:** Java, Python
- **ML Frameworks:** PyTorch, Scikit-Learn, MLOps
- **Software Development:** React.js, Django, Spring Core, Spring MVC, JPA, JDBC
- **Cloud and Containerization:** AWS, Docker
- **Database Management:** SQL, Oracle, MongoDB
- **Version Control & Project Management:** Git, Github, Jenkins
- **Data Visualization:** Splunk, Power BI, Excel

CERTIFICATIONS

Machine Learning Specialization, *Coursera* — Mar 2023
Java Standard Edition, *Accenture* — Apr 2022
Deep Learning Specialization, *Coursera* — Feb 2021
Python for Data Science and Machine Learning, *Udemy* — Apr 2020

PUBLICATIONS

Ethical Inferences and Study of AI in Music Industry — Apr 2024
University of Ottawa

An Autonomous System to Evaluate Technical Interview Process Using Machine Learning — Mar 2020
Journal of Emerging Technologies and Innovative Research

Video Analyzer Using Deep Learning — Sep 2018
SPJMR Journal

LEADERSHIP

Panimalar Engineering College, Anna University — Aug 2018
Led a team of five in an inter-college hackathon at VIT, where we developed a prototype within 24 hours to alert police and fire stations when a woman screams or in the event of a fire. Our team won second place.

PROJECTS

Can LLM's Solve Brain Teasers? — Jun 2024

- Evaluated the performance of Google's Gemma and Meta's Llama 3 large language models (LLMs) in solving brain teasers using a multiple-choice question-and-answer dataset from the SemEval 2024 Task 9 competition.
- Explored three strategies: fine-tuning transformer models like BERT for lateral-thinking-based MCQs, leveraging autoregressive models for maximum likelihood estimation without fine-tuning, and utilizing prompt engineering techniques for enhancing model performance.
- Investigated the effectiveness of these strategies to determine the models' capabilities and limitations in handling lateral thinking challenges, crucial for real-world applications.

Semi-Supervised Learning in Banking Marketing Data — Mar 2024

- Collaborated with a team of two to investigate semi-supervised learning methods for addressing label scarcity and class imbalance in a dataset from a Portuguese banking institution's marketing campaign.
- Implemented and compared four inductive semi-supervised learning approaches: self-training, co-training, semi-supervised ensemble methods, and unsupervised pretraining techniques.
- Demonstrated proficiency in feature engineering and model construction to handle imbalanced data, achieving significant performance improvements by leveraging unlabeled data alongside limited labeled samples.