KEVIN KNIGHTS

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SUMMARY

Machine Learning Engineer specialized in deploying scalable and robust Machine Learning Systems with 5 years of experience.

SKILLS

Machine Learning: PyTorch, TensorFlow, Keras, JAX, MLflow, Feast, Transformers, HuggingFace, Flask, Mahout. Data Engineering: Airflow, Spark, Hive, Kafka, Databricks, Postgres, GreenPlum, DuckDB, PGVector, Redis, MongoDB, Neo4j. Data Science: R. NumPy, SciPy, Polars, Pandas, Scikit-Learn, Power Bi, Matplotlib, Jupyter Notebooks, Anaconda, Mamba. Software Engineering: Python, Java, C++, C, CUDA, Go Lang, Rust, SQL, Scala, JavaScript. CI, Monitoring and Infrastructure: Git, GitLab, Docker, Kubernetes, Grafana, Prometheus, Azure (AI Studio), GCP (Vertex AI).

WORK EXPERIENCE

Machine Learning Engineer, AES, Panama City (Panama)

- Led organization-wide MLOps standardization by successfully deploying multiple AI applications across Supply Chain, and Clean Energy initiatives, establishing organizational best practices for ML model deployment and maintenance.
- Accelerated ML model deployment time from 7 days to 1 day by implementing standardized templates and processes.
- Reduced artifact registry costs by 40% by implementing and standardizing a tagging process of code and docker images.
- Established a comprehensive MLOps tools ecosystem supporting model deployment, monitoring, maintenance, and security.

Machine Learning Engineer, Dell Technologies, Panama City (Panama)

- Enhanced customer intent and sales opportunity identification as a result of increasing LLM's accuracy by 30%. Achieved this by enabling a Retrieval Augment Generation (RAG) architecture with PGVector containing earning transcripts and news embeddings.
- Streamlined model management processes, achieving a 50% reduction in time-to-market for new LLM applications. Accomplished this by developing LLMOps functionalities with MLflow, improving evaluation accuracy by 25% and operational efficiency.
- Improved the consumption of customer growth data (1M+ records) from 2 min. to 2 sec. with online feature serving. Achieved this by implementing a Feature Store with Feast to consolidate multiple features into a single dataset for machine learning workloads.
- Increased content generation efficiency by 50%+ and cost reduction by 95% on social media platforms by fine-tuning Meta's Llama v2 models with Dell's marketing data. Utilized Python, Hugging Face, QLora, PEFT, and Llama.Cpp.

Data Engineer, Dell Technologies, Panama City (Panama)

- Collaborated in a team of 4 engineers who developed a cutting-edge campaign automation solution that reduced execution times by over 50% using Apache Airflow and Docker, which resulted in fresher leads for Sales and optimized conversion rates.
- Contributed to engineering of SQL triggers for the pioneering US Small Business Reactivation campaign, resulting in a 26% increase in revenue per buyer and a 13% uplift in reactivation rates within just one month.
- Led the development of a global campaign lead pipeline that catalyzed a \$50M increase in incremental revenue within a quarter, by implementing a creative lead selection strategy with Python, SQL, and Airflow.
- Contributed to a Python and SOL-based quality check solution, enhancing data integrity and coverage by 40%. This solution was adopted by 30+ campaigns, which increased the quality and trust of 10M+ leads and contacts.

Senior Data Analyst, W. W. Grainger, Panama City (Panama)

- Enhanced operational oversight by developing a Power Bi dashboard that tracked process performance, team metrics, and quality metrics, facilitating the successful introduction of over 60,000 new products in Canada and Mexico.
- Reduced review processing time in 98% (from 3 hrs. to 2 min.) by automating the modification and addition of macros in 100+ Excel files using a Python script. This saved around 30 hours per review cycle, enhancing productivity and reducing errors.
- Delivered strategic product insights by analyzing sales metrics (Items Sold, Revenue, Profit, Profit Margin) for newly introduced products using SOL. This analysis yielded vital trends at 1, 3, and 6 months post-launch, refining sales and product strategies.

Data Analyst, Dell Technologies, Panama City (Panama)

Feb. 2020 – July 2021 • Improved customer engagement and satisfaction by strategically coordinating the utilization of \$10,000+ in training credits.

EDUCATION

Universidad Tecnologica de Panama, Panama City (Panama), Bachelor of Science in Electromechanical Engineering, GPA: 2.03/3.0

OTHER SKILLS

Team Leader: Managed teams of 2–3 Engineers. Mentored 10+ engineers for technical upskilling and career progression. Speaker: AI Keynote Speaker at 10+ events with 1000+ audience, Microsoft Certified Trainer (MCT). **Open Source:** Contributed a Learning Python training series on GitHub to teach Python in schools across the entire Panama. Awards: Hackathon 2nd place winner (out of 50 participants) — Online Classes Engagement with Computer Vision Analytics. Languages: Spanish (native), English (fluent), Portuguese (fluent), German (Basic).

Certifications: Microsoft Azure AI-900, Databricks Data Engineer Associate, Agile Scrum Master, Lean Six Sigma Yellow Belt.

Aug. 2021 – May 2022

Aug. 2023 – April 2024

April 2024 – Present

June 2022 – Aug. 2023