Data Scientist

**Etay Lorber | Tel Aviv, IL**

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**Summary**

**Data Scientist** with **3 years** of experience building AI tools in both research and industry, and a **fast-track M.Sc.** in software and information systems engineering from Ben Gurion University.

Skilled in building **agentic RAG systems**, tools, and multimodal AI applications. Experienced in working with **large-scale ML pipelines** at Intel and applying **DL models** in real-world scenarios.

**Technical Skills & Focus:**

* ML Research: **Model Evaluation & Testing, Transformer Architectures, LLM Integration & Analysis**
* Advanced AI/ML: **LangChain, LangGraph, PyTorch, TensorFlow, HuggingFace Transformers, Scikit-learn, Spark, Airflow**
* Core Development: **Python, Java, Git, Linux, SQL, NoSQL, Vector DBs, AWS, GCP, Azure**
* Research Interests: **Agentic RAG, Multi-agent Systems, Computer Vision, Time Series**

**Experience**

Apr 2023 - Current **Data Scientist**, AI Chatbot Team, **Intel AI Solution Group**

* **Developed** multimodal capabilities for the RAG agent by implementing image retrieval and image generation using multimodal LLMs, enabling visual and hybrid queries and allowing over 50,000 users to gain insights from their diagram images.
* **Engineered** a Text2SQL tool for the RAG agent to query Intel's bug databases using natural language — achieving improvements in bug detection and merging insights across architecture and defect records.
* **Implemented** an evaluation framework for the RAG agent to assess context retrieval and generation quality, enabling systematic performance monitoring and optimization.
* **Designed** and built ingestion pipelines for DOCX, PDF, and HTML files, storing data in Elasticsearch and Milvus — enabling over 3 million internal Intel documents to be accessed through the RAG agent.
* **Led** the integration of Intel's Confluence wikis into the RAG agent using LangChain and custom crawlers — turning static docs into searchable answers and improving internal knowledge access across teams.

May 2022 - Apr 2023 **Machine Learning Engineer**, Chip Design Automation Team, **Intel AI Solution Group**

* **Developed** Python and Spark-based workflows to detect pre-silicon chip design bugs using large test datasets stored in Hadoop — accelerating the bug detection process and reduced costs in silicon validation tests.
* **Automated** GitHub CI/CD workflows with Python and Jenkins, including client onboarding, file updates, and vault configuration — accelerating client registration.
* **Integrated** SonarQube with GitHub to deliver real-time static code analysis during PR reviews and **developed** git2vault to validate and track Intel’s secure configuration files — together improving code quality and auditability across GitHub repos.

Oct 2023 - Oct 2024 **Teacher Assistant & Researcher**, **Ben Gurion University**

* **Instructed** machine learning courses including Time Series Analysis and Data Mining for Algo Trading for Fourth Year 80+ students.

**Education**

2023 - 2024 **M.Sc in Information System Engineering** (**GPA: 94)**, Ben Gurion University

* **Thesis**: Estimating Cannabis Flower Maturity in Greenhouse Conditions using Computer Vision - Implemented and fine-tuned models including YOLO, Mask R-CNN, and CNN classifiers to detect and classify trichomes and pistils in macro images for maturity estimation.
* Research focus: Computer Vision in Agriculture, Multi Steps Pipelines, Deep Learning Architectures.
* Selected for accelerated B.Sc/M.Sc research track for distinguished students.

2020 - 2023 **B.Sc in Data Science and Engineering (GPA: 89)**, Ben Gurion University

**Military Service**

Mar 2014 - May 2017 **Team Leader / Dept. Company Commander**, **Yahalom Special Engineering Unit**

* Led an elite team, developing strong leadership, decision-making, and team management skills.
* Planned and executed complex operations utilizing cutting-edge technologies.