

Amit Malka

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Profile

Generative AI Developer seeking my next challenge. A graduate of an intensive **AI Development Course** and holder of a **B.Sc. in Biotechnology** (Data Analysis track). Passionate about combining strong analytical skills with hands-on coding to build scalable AI agents and LLM-based solutions.

Experience

LAB TECHNICIAN & SHIFT MANAGER | MYHERITAGE | 2020 -2021

- **Promoted to Shift Manager**, overseeing daily operations and resolving real-time bottlenecks.
- Designed workflow optimizations driving **50X throughput increase** (200 to 10k daily tests).
- Co-developed operational workflows from scratch, establishing processes for mass-scale testing.

Projects

FINANCIAL RAG SYSTEM | AI DEVELOPMENT COURSE FINAL PROJECT | [LINK](#)

- Architected metadata-driven hybrid RAG agent for SEC 10Q financial document with vector + graph retrieval.
- Engineered multi-modal pipeline processing text, tables, and charts using LlamaIndex and advanced parsing.
- Implemented dual architecture integrating ChromaDB vector store with Neo4j graph database.
- Developed interactive Gradio interface with configurable controls for real-time retrieval optimization.

CORTEX | FULL STACK AI APPLICATION| [LINK](#)

- Built manager syncing with **Google Drive API**, featuring bi-directional synchronization and metadata analysis.
- Developed "**Organic UI**" via **Vue 3, Tailwind & Chart.js** visualizing storage usage and analytics.
- Integrated **GPT-5-nano** for "RAG-lite" chat, enabling natural language querying of metadata.
- Backend architecture: **Node.js (Express), TypeScript, PostgreSQL (Prisma)** for robust data management.

RESIPLAN AI | SOROKA HACKATHON (2ND PLACE) | [LINK](#)

- **Won 2nd place** for AI scheduling system optimizing residency programs.
- Engineered constraint solver using **Google OR-Tools** generating valid 6-year schedules compliant with regulations.
- Implemented **Streamlit** dashboard with **predictive bottleneck analysis** for 12-month capacity forecasting.
- Integrated **Gemini 3** to provide real-time suggestions and validate schedule constraints.

Education

AI DEVELOPMENT COURSE | BEN-GURION UNIVERSITY & THE INSTITUT | 2025

- Advanced curriculum covering LLMs, RAG systems, MCP, and AI Agents.
- Hands-on development of intelligent agents with memory, logic, and reasoning capabilities.

BACHELOR OF BIOTECHNOLOGY-BIO DATA | TEL HAI COLLEGE (GPA 85) | 2020 - 2023

- Combined curriculum of biological sciences with specialized data analysis coursework
- Developed strong foundation in statistical methods and computational biology
- Key coursework: Statistics, Programming for Data Analysis, Computational Biology, Advanced Python programming
- Gained hands-on experience with bioinformatics tools and statistical analysis of complex biological datasets

SKILLS & ABILITIES

- **Programming Languages:** Python, R, SQL, JavaScript, TypeScript
- **Gen AI & LLMs:** RAG Systems (Hybrid/Agentic), AI Agents, LangChain, LlamaIndex, Google GenAI, Prompt Engineering.
- **Web Development:** React, Vue.js, Node.js, Streamlit, Tailwind CSS, HTML/CSS
- **Databases & Backend:** PostgreSQL, Prisma ORM, Vector DBs (Chroma/Pinecone), GraphDB (Neo4j).
- **Data & Optimization:** Google OR-Tools, Pandas, NumPy, Data Visualization (Chart.js), Statistical Analysis.
- **Soft Skills:** Technical Skills & Core Competencies, Team Collaboration, Fast Learner & Adaptable

Volunteering & military service

RESERVE COMBAT SOLDIER AND COMMANDER | 2017 - NOW

- ~300 reserve duty days since October 7, 2023

MILITARY SERVICE | GIVATI | 2014 - 2017

- Managed logistics for 120 soldiers in dynamic operational environments
- Developed leadership skills through high-pressure tactical missions
- Coordinated team activities, fostering collaboration and efficiency