

Tomer Karmazin

SOFTWARE DEVELOPER

ABOUT ME

I'm a Computer Science graduate with a strong focus on AI, data analysis, and real-world system design. I specialize in Python programming and enjoy solving complex problems through clean, structured code. My work combines algorithmic thinking with practical implementation—ranging from market data analysis to terrain-aware pathfinding systems. I'm driven by a deep understanding of how systems operate and a constant push to optimize and improve. Ready to contribute in fast-paced, high-impact environments while continuing to grow as an engineer.

CONTACT

- +972-548008182
- tom@jeepsea.co.il
- [Linkedin](#)
- [Github](#)
- Tel-Aviv, Isreal

SKILLS

- Python
- SQLite
- Data-analysis
- JavaScript
- MongoDB

LANGUAGE

Hebrew - Native Language
English- Fluent

PROJECTS

ORP - Optimal Route Planning

React, Python (Flask), Node.js, Express.js, MongoDB, Google Maps/Elevation API

Final Project - Afeka College of Engineering, 2025

A full-stack web application for generating off-road walking routes based on real-time elevation data. Users select waypoints on a map, and the system calculates a terrain-aware path using a custom A* algorithm. Built to support areas without roads or trails. Fully deployed and live at: [ORP - final project website](#)

- React and Google Maps JavaScript API power the interactive frontend, allowing users to place custom markers and generate a route.
- Google Elevation API provides global elevation data used to generate the terrain grid for route calculations.
- Python Flask backend processes elevation matrices and runs a custom A* pathfinding algorithm that filters out paths exceeding 30% incline.
- Node.js and Express.js handle user authentication, session management, and route persistence.
- MongoDB stores user credentials, route metadata, and full route history, supporting retrieval and export functionality.
- Railway is used to deploy both backend services and the frontend, enabling the system to operate online with CI/CD support.

Market Analysis and Prediction System.

Python, SQLite, GeckoTerminal API, Gmail API, asyncio, numpy

Independent Project | 2024-Present

Developed an automated market analysis system that tracks and analyzes tokens, leveraging advanced data analysis and real-time market data to detect price patterns and execute optimized trading strategies.

- Analyzed data from 1200+ tokens, implementing a dynamic algorithm that adapts based on market conditions, achieving an 82% success rate in predicting profitable trades.
- Built a high-performance system using SQLite for efficient data management and real-time data fetching.
- Engineered the system to easily scale, enabling the tracking of more tokens by upgrading API access, with the capacity to double the current token tracking without performance degradation.
- Implemented a real-time data handling strategy, ensuring the system reacts promptly to market changes while maintaining data integrity and minimizing response time.
- Developed custom data analytics tools to assess token performance, identifying correlations and trends that informed better trading decisions.
- Optimized system performance by introducing performance enhancements and leveraging efficient data retrieval techniques, ensuring real-time market responsiveness.
- Implemented detailed logging to track system activities, errors, and performance metrics, enabling easy debugging, performance analysis, and ensuring system reliability in production environments.

EDUCATION

Afeka College - B.Sc in Computer Science

2021 - 2025

Graduated with strong focus on data structures, algorithms, Python, machine learning fundamentals, and applied data analysis.

MILITARY SERVICE

Paratroopers Brigade

Combat Soldier (Battalion navigator)

2017 - 2018