Tomer Karmazin

SOFTWARE DEVELOPER

ABOUT

I am a Computer Science student nearing the end of my studies, with a broad understanding of data structures and algorithms. I have experience with Python, Java, SQL, and mobile application development. My interests lie in finance, AI.

I am eager to expand my knowledge both within and beyond my formal education. I recently developed a Pathfinding Visualization Game, combining algorithmic problem-solving with intuitive UI/UX design. I am passionate about building innovative solutions and aspire to contribute to impactful projects in AI and fintech.

CONTACT

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- tomer@jeepsea.co.il
- <u>Linkedin</u>
- Github
- Tel-Aviv, Isreal

SKILLS

- PythonJAVA
- Javascript

- C
- mySQL
- MongoDB

LANGUAGE

Hebrew - Native Language English- Fluent

PROJECTS

Crypto Market Analysis Project Solana Token Price Pattern Analysis System | Python, Data Analytics, Statistical Modeling

Independent Project | 2023-Present

Designed and implemented an autonomous trading signal system for Solana blockchain tokens that identifies specific price patterns and market inefficiencies. The project aimed to capture events by detecting significant price drops followed by recovery periods - a pattern I discovered through statistical analysis of historical token data.

- Engineered a Python-based cryptocurrency monitoring system with asyncio for concurrent API requests, achieving 20 token tracking with 5minute OHLCV candle processing
- Implemented RESTful API integration with GeckoTerminal using aiohttp, incorporating rate limiting and exponential backoff retry mechanisms
- Developed vectorized pattern recognition algorithms using pandas and numpy to detect price formations based on historical data
- Created statistical analysis pipeline using pandas DataFrames to calculate key metrics (drop percentages, recovery rates) across 200+ unique tokens with automated outlier detection
- Designed a hybrid data storage architecture using Parquet and Excel/CSV for optimizing both query performance and human readability
- Built data visualization tools with matplotlib and interactive components enabling manual pattern verification and timeframe selection
- Implemented alerting system via Gmail API with customized message formatting based on event type and data
- Architected a fault-tolerant system with comprehensive error handling and logging that maintains 24/7 operation with automatic recovery from API failures and network disruptions

Python - Algorithms visualization game

I developed a Pathfinding Visualization Game to demonstrate my Python programming skills and knowledge of algorithms acquired during my Computer Science studies. The project uses Pygame to create an interactive grid and visualize the execution of pathfinding algorithms. Intuitive UI with visually appealing elements to enhance user understanding. The game includes functionality to save metadata and snapshots of the grid to an Excel file.

- Implementing BFS ,DFS, A* ,IB-RRT* as a searching algorithms.
- Implemented functionality to export grid metadata and images to Excel.
- Interactive grid interface with appealing elements and responsive design.

EDUCATION

Afeka College - **B.Sc in Computer Science** 2021 - 2025

At my academic studies, I have gained different skills such as problemsolving, deep understanding of both theoretical and practical aspects of Computer Science and time managment for a succecful proefficient schedule

Strong understanding of data structures and object-oriented.
 Programming and algorithms.
 Working with partners and delivering projects under pressure.

MILTARY SERVICE

Paratroopers Brigade Combat Soldier (Battalion navigator) 2017 - 2018

- Combat navigator in overall operational force.
- Combat soldier as Frontline combatant. .
- Responsibale for units route on missions.