

ZIAD ELSHERIF

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PROFILE

I build and run systems end to end: the data layer, the model or analysis on top, the software people use it through, and what is needed to keep it running. That work spans enterprise operations, automated data pipelines, a commercial AI product, IoT and quantitative infrastructure. As CTO & Head of Data Management at Ace Virtual Assistance I own the technical architecture, data operations and automation, and lead the technical team. Currently studying for an M.Sc. in Financial Economics.

EXPERIENCE

CTO & Head of Data Management — Ace Virtual Assistance (AVA)

2024–Present

- Own the technical architecture, data operations and automation for a U.S.-focused business, lead the technical team, and turn operational requirements into engineering priorities.
- Led the build of a full-stack operations platform covering CRM and pipeline, agent and campaign workflows, telephony, reporting, payroll workflows, real-time state and scheduled jobs.
- Designed the data acquisition and enrichment workflows that turn scattered external and internal data into a prioritised, usable form for sales and operations.

AI, Quantitative Systems & Data Specialist — Independent

2023–Present

- Build Python systems from data ingestion and feature engineering through model validation, deployment, monitoring and external API integration.
- Designed and built a systematic trading stack: multi-asset data warehouse, alpha and feature research, ML models, walk-forward validation, portfolio and risk controls, and automated broker execution.
- Applied ML across financial, business-data and IoT problems, with attention to reproducibility and honest out-of-sample testing.

Web & Application Developer — Independent / Project Work

2021–2023

- Built web applications, backend logic, databases and internal automation tools using Python, Java, C#, SQL and web technologies.

SELECTED SYSTEMS

TRIVMIRI — Quantitative Trading & ML Infrastructure *Quant ML • Research to Production • Execution*

- Full Python stack from market-data warehouse through feature and alpha research, XGBoost and ensemble models, walk-forward validation, portfolio and risk logic, OANDA execution and monitoring.
- Backtesting, Monte Carlo, stress and friction testing, signal auditing and data-freshness checks before anything reaches execution.

AVA Enterprise Operations Platform *Enterprise B2B • Architecture • Automation*

- React/Vite, FastAPI/Python and PostgreSQL/Supabase platform with role-based access, CRM and lead workflows, agent and campaign management, CallTools integration, chat and tickets, reporting, real-time updates and background jobs.

REIP — Automated B2B Data Intelligence [Data Engineering](#) • [Automation](#) • [Lead Scoring](#)

- Pipeline running acquisition, enrichment, entity resolution, scoring and CRM handoff, with call outcomes fed back so scoring improves against real results.

Plateful — AI Menu Intelligence Platform [B2B2C Product](#) • [Founder](#) • [IEEE YESIST12 Finalist](#)

- React Native/Expo, Node/Express and MongoDB product combining menu and sales analytics with AI-generated pricing and menu recommendations for restaurants.

Wi-Fi Human Activity Recognition (ESP32) [IoT](#) • [Signal Processing](#) • [ML](#)

- Two-board Wi-Fi RSSI sensing pipeline; collected 22,580 real-world samples and trained a Random Forest classifier for standing, walking and jumping at 96.27% test accuracy.

Community X [Founder & Operations Lead](#)

- Lead operational direction, product coordination and execution for a founder-focused operating environment.

EDUCATION & RECOGNITION

M.Sc. Financial Economics — Manipal Academy of Higher Education (MAHE)

Current

B.Sc. Electronics & Communications Engineering — Arab Academy for Science, Technology & Maritime Transport

2026

- Graduation project: adaptive beamforming for smart antenna systems, covering direction-of-arrival estimation.
- Finalist, IEEE YESIST12 2026 Special Track with Plateful, from over 2,000 submissions. Grand Finale, Jakarta, October 2026.

TECHNICAL STACK

AI & Quant Machine learning, feature engineering, XGBoost, scikit-learn, statistical modelling, time-series analysis, walk-forward validation, backtesting, Monte Carlo, risk modelling

Data & Backend Python, FastAPI, Node.js, Express, SQL, PostgreSQL, MongoDB, Supabase, REST APIs, ETL, data enrichment, automation

Frontend & Engineering React, React Native, Expo, Vite, C++, Java, C#, JavaScript, signal processing, system integration

Leadership Technical architecture, team leadership, translating product needs into engineering work, build-versus-buy

TRAINING & LANGUAGES

Training Coursera Machine Learning & Data Analysis (2023–24) • Mercedes ANA • Toshiba El Araby • ANRPC Electronics & Marine Transport (Aug. 2026)

Languages Arabic (native) • English (fluent) • French (professional)