

Mohammad Eissa

Worcester, MA (open to relocation) — (317) 515-4773 — meissa@wpi.edu — LinkedIn — mohammadeissa.com

Data Science student and NCAA athlete with experience in green-finance valuation (List4Free), credit-risk modeling (EFG Holding), and client-facing consulting (Deloitte, Haioku Group). Seeking full-time consulting, finance, and investment roles (available May 2027).

Education

Worcester Polytechnic Institute

B.S. in Data Science — GPA: 3.8

Worcester, MA

Expected May 2027

Coursework: Financial Accounting, Macroeconomics, Probability & Statistics, Applied Statistics, Linear Algebra

Experience

List4Free LTD

Quantitative Research Analyst & Product Lead

Remote

Sept 2025 – Present

- Architected a valuation framework that lets UK homeowners monetize surplus energy-efficiency (EPC) ratings as carbon credits, quantifying sustainability-linked asset premiums across 20M+ residential records.
- Built the methodology for estimating, validating, and pricing annual carbon-credit potential at the individual-property level, with degradation and audit-ready validation logic for regulatory credibility and long-term scalability.
- Aligned model assumptions and pricing with UK EPC regulations, ETS carbon pricing, and green-bond mechanisms, working with Prof. Michael Radzicki (WPI) and company leadership.
- Translate model outputs into investor-facing reports, dashboards, and strategic recommendations; contribute to commercialization strategy, investor positioning, and equity structuring as a shareholder.

Deloitte

AI & Data Intern

Cairo, Egypt

May 2026 – Aug 2026

- Built an autonomous AI agent end to end, translating business requirements into a working system that plans tasks, calls tools, and executes multi-step workflows without human intervention.
- Led development of an AI-powered résumé-screening platform for Deloitte Egypt HR, converting recruitment criteria into a structured, explainable candidate-scoring methodology.
- Advised intern teams across Deloitte's six-project Bridge Program on problem structuring, solution design, and delivery.

Haioku Group

Student Consultant – Urban Sustainability & Data Strategy

Kobe, Japan

Mar 2026 – May 2026

- Conducted field research, stakeholder interviews, and analysis of government housing, demographic, and real-estate data on Haioku's acquisition and reuse of abandoned properties, identifying operational risks and expansion opportunities.
- Built a decision-support platform scoring properties on investment fit, renovation risk, and community impact; presented recommendations on property selection, workforce, construction planning, and financial sustainability to leadership.

EFG Holding

Risk Management Intern

Cairo, Egypt

July 2025

- Built a real-time SME credit-evaluation model from bank-statement data, cutting underwriting time from hours to seconds.
- Engineered liquidity, revenue-stability, volatility, and behavioral features, improving predictive precision by 20%; prototype for scalable digital credit scoring in data-scarce emerging markets.

Research

Worcester Polytechnic Institute

Quantitative Modeling Researcher — Energy Systems (Prof. Adam Powell)

Worcester, MA

Nov 2025 – Present

- Built a techno-economic model deciding when an energy-intensive metals plant should run, pause, or ramp on forecasted electricity prices; Monte Carlo ROI simulation and threshold-price optimization find profit-maximizing windows under uncertainty.
- Analyze capital-cost sensitivity, utilization tradeoffs, and risk drivers with tornado plots and probabilistic cost curves; frame results as strategic recommendations balancing profitability, capital utilization, and decarbonization.

Worcester Polytechnic Institute

Computer Vision Researcher — Swimming Systems (Prof. Wei Xiao)

Worcester, MA

Sep 2025 – Present

- Develop a computer-vision motion-analysis system (YOLO, OpenCV) that estimates swimmer velocity, stroke rate, distance per stroke, and efficiency from underwater footage using lane-line detection, body segmentation, and temporal tracking.
- Run validation, error, and failure-mode analysis to establish metric reliability; document architecture and methodology for reproducibility toward a manuscript in progress and a potential sports-tech venture.

Skills & Leadership

Finance & Analytics: Financial modeling, valuation, credit risk, Monte Carlo simulation, scenario and sensitivity analysis, forecasting, market research, executive presentations

Technical: Excel (advanced modeling), Python (pandas, NumPy, statsmodels), SQL, Power BI, Tableau

Certifications: Bloomberg Market Concepts; Goldman Sachs Risk & JPMorgan Quantitative Research job simulations

Leadership: NCAA Varsity Swimmer (GLVC Conference Champion 2024); WPI Investing, Data Science, MSA, and MENA Clubs

Languages: English, Arabic