

AHMED ELTAWHEEL

Senior AI Product Solution Architect | Actuary | Academic Researcher

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PROFESSIONAL SUMMARY

Results-driven AI Product Solution Architect and AWS Community Builder (2022–2025) with over 7 years of experience in AI/ML, Risk Analytics, and Actuarial Science. Expert in designing and scaling GenAI ecosystems, RAG pipelines, and multi-agent systems for enterprise automation. Proven track record in bridging the gap between C-level business vision and technical implementation across Banking, Insurance, and Telecom sectors. M.Sc. Candidate in Data Science with a focus on optimizing financial models using AI and telemetry data.

TECHNICAL SKILLS

- **AI/ML & GenAI:** Large Language Models (LLMs), RAG Architectures, Multi-Agent Systems (CrewAI), Prompt Engineering, Vertex AI, Amazon SageMaker, TensorFlow, PyTorch, Scikit-learn.
- **Data Engineering & Analytics:** SQL, Python (Pandas, NumPy), R, Power BI, Google Cloud BigQuery, Azure Data Factory, Spark.
- **Cloud Platforms:** AWS (Solutions Architect - Professional, Machine Learning Engineer - Associate, Data Analytics), Google Cloud (Professional Machine Learning Engineer, AI/ML Pre-sales Technical Expert, Data Analytics Professional), Azure (Data Engineer - DEPI).
- **Specializations:** Actuarial Modeling (Life & Pension), Risk Management (ISO 31000), Survival Analysis, Computer Vision, NLP.

PROFESSIONAL EXPERIENCE

Konecta Global | Egypt/Europe

AI Product Solution Architect | Dec 2024 – Present

- **GenAI Ecosystem Architecture:** Leading the end-to-end design of GenAI ecosystems for 3 major European insurance clients, handling over **50k+ monthly queries** with **95% accuracy** in retrieval.
- **Strategic Roadmapping:** Translating high-level business vision into robust BRD/BRS documentation, bridging the gap between C-level stakeholders and **5+ technical squads**.
- **ROI Validation:** Implemented Power BI analytics tracking **€2M+ in potential operational savings**, validating the business impact of AI initiatives.
- **Accelerator Development:** Created internal "GenAI Accelerators" that reduced AI adoption time by **40%**, standardizing deployment across the organization.

Financial Regulatory Authority (FRA) | Egypt

Senior Actuarial & Data Analyst | Jul 2021 – Dec 2024

- **National BI Ecosystem:** Spearheaded the development of a national BI ecosystem monitoring **10M+ annual records**, ensuring the stability of Egypt's Life Insurance and Pension sector.

- **Process Automation:** Engineered Python-based modeling frameworks that automated complex documentary cycles, slashing manual processing time by **60% (from weeks to days)** and eliminating human error.
- **Regulatory Oversight:** Conducted deep-dive assessments of actuarial pricing models for **15+ regulated entities**, ensuring national compliance and financial resilience.

Mohandes Insurance | Egypt

Actuarial / Risk Analyst | Jul 2019 – Jul 2021

- **ERM Framework Design:** Designed the company's first-ever ERM policies, identifying and mitigating **50+ critical operational risks** across all departments in the first year.
- **Innovation Strategy:** Led feasibility analysis for new product lines, contributing to a projected **10% revenue growth** through diversified offerings.
- **Data-Driven Optimization:** Leveraged R/Python analytics to identify bottlenecks, achieving a **15% improvement** in loss ratio efficiency for key portfolios.

FEATURED PROJECTS

- **Wasel Green Path (Gemini 3 Hackathon):** Accessibility suite serving a target of **10k+ users**, reducing emergency response time by **30%** via AI location analysis.
- **National Tax Compliance Portal:** Automating compliance checks for **100k+ daily transactions** with zero downtime during peak tax seasons.
- **Sign Language Translation Hub:** Achieved **<200ms latency** in real-time sign detection with **90%+ gesture recognition accuracy** using Vertex AI.
- **Telegram Health Insurance Bot:** Intelligent agent handling **5k+ interactions/month**, reducing level-1 support tickets by **45%**.
- **Internal AI Search Assistant:** Indexed **20,000+ corporate documents**, reducing employee information retrieval time from **15 minutes to <30 seconds**.
- **AI Newsletter Crew:** Automated content generation for **5,000+ subscribers**, reducing production time by **90%** (from hours to minutes).

EDUCATION

Master of Science in Data Science (In Progress)

Cairo University, Egypt

- **Thesis:** Applying AI Tools to Optimize Actuarial Pricing and Risk Models Using Wearable Device Data.

Bachelor of Science in Actuarial Science

Cairo University, Egypt | 2012 – 2016

KEY CERTIFICATIONS & HONORS

- **Professional Machine Learning Engineer** | Google Cloud (Valid thru Dec 2027)
- **AI/ML Pre-sales Technical Expert** | Google Cloud (Valid thru Jan 2027)
- **Google Cloud Data Analytics Professional** | Google Cloud (Valid thru Nov 2028)
- **AWS Certified Solutions Architect – Professional** | AWS (Valid thru Jan 2029)
- **AWS Certified Machine Learning Engineer – Associate** | AWS (Valid thru Jan 2029)

- **AWS Community Builder (AI/ML Track)** | 2022 – 2025
- **Azure Data Engineer (DEPI)** | Microsoft
- **McKinsey Forward Champion** | McKinsey & Company
- **Certified Innovation Leader (CIL)** | ITIDA (Valid: 2023–2033)
- **Power BI Certified Specialist** | Microsoft