

Adham Hussin

+201093401932 | adhamhusn@gmail.com | Cairo, Egypt | [LinkedIn](#) | [GitHub](#) | [Portfolio](#)

SUMMARY

Final-year Computer Engineering student at Cairo University with production QA/automation experience at Siemens EDA and a strong ML/NLP background, including a competition-winning diacritization model, a deployed credit risk API, and end-to-end big data pipelines. Comfortable across testing, ML modeling, and MLOps workflows.

EDUCATION

B.Sc. Computer Engineering — Cairo University, Cairo

Oct 2021 – Jul 2026 (Expected)

Grade: 88.82% | **Relevant Courses:** Data Structures & Algorithms • OOP • Algorithms • NLP • Big Data & Cloud Computing • Machine Learning • Image Processing & CV • Database Management • Operating Systems • Compilers

EXPERIENCE

QA & Test Automation Intern — Siemens DISW, Cairo

Jul 2025 – Dec 2025

- Validated 63 issues (18 ERs > 5 customer-impacting, 45 bugs > 16 customer-impacting) and reported 49 issues including 4 critical; contributed to the 2025.3 release checklist.
- Extended the team's Squish Python automation library to make GUI test cases coordinate-independent; resolved ~300 regression failures in the Questa One EDA tool.
- Built a POC pipeline automating visual reference updates across frontend, backend, and Squish source; authored helper scripts for daily QA workflows.

QA & Test Engineering Intern — Siemens DISW, Cairo

Jul 2024 – Dec 2024

- Migrated 200+ test cases from legacy infrastructure, achieving 8% increase in TCL command coverage for the Visualizer EDA tool; conducted manual testing across 500+ commands.

Web Development Intern — Cairo University, Cairo

Jul 2023 – Sep 2023

- Delivered 3+ full projects in under 2 months: a portfolio site (JS, HTML, SASS) and a resume-builder web app (React, TypeScript, Node.js).

PROJECTS

Arabic Text Diacritization — NLP Competition (1st Place)

- Designed a dual-model BiLSTM architecture (character-level + word-level) with frozen AraBERT embeddings and task-specific Word2Vec; ensemble of 9 models achieved 1.90% DER, ranking 1st class-wide.

Telecom Churn Intelligence — Big Data & Cloud (Solo)

- Built end-to-end PySpark pipeline on 594K records: 20-plot EDA, custom MapReduce K-Means via RDDs, FPGrowth association rules, and Spark MLlib classifiers; ran on Databricks cloud.
- Produced stakeholder-ready findings: identified month-to-month contracts and fiber optic plans as top churn drivers; recommended ecosystem lock-in via service bundling backed by association rule mining.

Credit Lending Classification — Data Science (Deployed)

- Trialled gradient boosting, linear, kernel, and ensemble classifier families with SMOTE and class-weight imbalance strategies on 938K LendingClub + FRED macro records; tuned decision thresholds against a business portfolio-value metric.
- Best model delivered +\$23.6M portfolio value over approve-all baseline (+27.7%); all experiments tracked via MLflow.
- Deployed as a live FastAPI endpoint on Hugging Face Spaces via a GitHub Actions CI/CD pipeline; model hosted on Hugging Face Model Hub.

Telegram Clone — QA Team Lead (Software Engineering)

- Led E2E testing using Cypress (web) and Flutter integration tests (mobile) with 90%+ coverage target; isolated all selectors in a dedicated file for GUI-change resilience.

PATHly — Learning Roadmap Aggregator (Graduation Project)

- NLP pipeline (NER, relation extraction, feature classification) over aggregated MOOC, GitHub, and research sources; generates explainable roadmaps via knowledge graph traversal and experimental GNN ranking.

EXTRA-CURRICULAR

Software & Automation Development Vice-Head — Cairo University Racing Team (CURT)

Sep 2023 – Present

SKILLS

ML/AI: Python • scikit-learn • XGBoost • CatBoost • PyTorch • BiLSTM • AraBERT • Word2Vec • NLTK • MLflow • FastAPI • Hugging Face
Data & Big Data: PySpark • Spark MLlib • Databricks • Pandas • Matplotlib • Seaborn • SQL • PostgreSQL • MongoDB • FRED API
QA & Automation: Squish (GUI) • Cypress • Flutter Integration Testing • TCL • EDA Tools (Visualizer, Questa) • Perforce • JIRA
Engineering: C++ • Git • GitHub Actions • Docker • Linux • Shell • React • TypeScript • Node.js
Languages: English (Fluent) • Arabic (Native) • German (Beginner)