

EDUCATION

- **Mansoura University** Mansoura, Egypt
Bachelor's Degree in Computer Science Grade: Very Good 2021 – 2025

EXPERIENCE

- **Yoono** *via Adappt* Remote - UK
Software Engineer Oct 2024 – Present
 - **Pipeline Quality & Observability Platform:** Designed and built an internal Next.js testing suite that became the team's primary tool for detecting and diagnosing pipeline regressions — cited by Yoono as the most impactful internal tool delivered to the project. Reduced Azure Blob Storage sync time from over 2 hours to minutes through infrastructure optimizations with the DevOps team.
 - **Time-Series Regression Tracking:** Implemented automated syncing and processing of up to 300MB result blob files, generating time-series visualizations that let engineers pinpoint exactly when and where pipeline degradation occurred across deployments.
 - **Article Diff Matching Tool:** Built a comparison tool that reruns sets of up to 10k and more articles against any deployed environment, surfaces the current GitHub branch in deployment, and produces a structured diff analysis between runs — enabling confident validation of changes before promotion.
 - **Full Pipeline Comparison Tool:** Developed a persona-level comparison feature that diffs complete pipeline outputs (covering all downstream services) across branches or environments, giving the team end-to-end visibility into what improved or degraded between deployments.
 - **Article Matching Service:** Developed and maintained a core pipeline microservice that matches articles against individuals using personal and professional profile data and interpersonal linkage graphs, processing up to 10k articles per run with LLM-based relevance evaluation (128k token context window).
 - **AI-Powered Summarization Service:** Built and maintained a summarization microservice that aggregates all pipeline-collected data to generate structured, multi-dimensional reports covering personal and professional aspects of individuals.
 - **Records De-duplication POC:** Contributed to a de-duplication service using string similarity algorithms, clustering ML models, and Neo4j graph similarity to identify and link duplicate person records — delivered a successful POC that is now being productionized.
- **Adappt** Remote - UK
Junior Software Engineer May 2024 – May 2025
 - **LLM-based Search Tool:** Developed microservices using Retrieval-Augmented Generation (RAG) and LangChain for model management.
 - **Vector Database Integration:** Stored and queried embeddings in Chroma and Elasticsearch vector databases.
 - **Python to Node.js Migration:** Converted Python query module into a Node.js microservice with TypeScript, Socket.io, and Express.
 - **Next.js Search Application:** Built Next.js app for searching large file sets from SharePoint and Google Drive, integrating Microsoft Graph API and Prisma for CRUD operations.
 - **AI-Powered Product Backend:** Contributed to an AI matching system and summarization microservice using Azure Durable Functions, Python, and Neo4j.
- **Adappt** Remote - UK
Software Engineering Intern Feb 2024 – May 2024
 - **Internal Tracking Tool:** Developed Blazor Server tool with optimized backend services and D3.js charts for data visualization.
 - **WHO GOARN Mobile App:** Initiated .NET MAUI Blazor Hybrid app with API integration and notification service implementation.

PROJECTS

- **Semantic Code Search Engine (B.Sc. Graduation Project)**

Python, Node.js

Oct 2024 – Jul 2025

- **RAG Implementation:** Built semantic code search engine using transformer-based code embeddings for natural language queries on large codebases.
- **Microservices Architecture:** Developed a vector retrieval service (Python, ChromaDB, embedding models) and an ML model service within a microservices system, connected via RabbitMQ as the message broker.
- **Frontend Development:** Web app with Remix.js, React.js, and Monaco Editor integration with a Visual Studio Code inspired theme for a developer-friendly UI/UX.
- **Project Demo:** [Link](#)

- **FCIS-Archive**

.NET, C#

Jul 2023 – Sep 2023

- **Web Application:** Developed a web app that parses college exam PDFs into interactive polls, used by 200+ students with over 100k solved questions. Built with .NET, C#, and regex for parsing, Entity Framework Core for database operations, and .NET Identity for authentication. Deployed on Azure with a DigitalOcean hosted database.
- **Open Source:** github.com/EslamTamim/FcisArchive

SKILLS

- **Languages:** TypeScript, JavaScript, Python, C#
- **Web Technologies:** Express, React.js, Remix.js, Next.js, Socket.IO, ASP.NET Core, Blazor
- **Databases:** PostgreSQL, Redis, Elasticsearch, Vector Databases (ChromaDB), Neo4j
- **AI/ML:** LangChain, RAG pipelines, LLM integration, embedding models, clustering algorithms
- **Cloud/DevOps/Other:** Azure (Blob Storage, Durable Functions), AWS, Docker, Git, RabbitMQ

CERTIFICATIONS

- **AWS Cloud Practitioner:** 2024
- **React Development Cross-Skilling Nanodegree, Udacity-FWD:** 2022