

## EDUCATION

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

## EXPERIENCE

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- **Adappt** Remote - UK  
*Software Engineer* Jun 2025 – Present
  - **Current Engagement:** Fully embedded at Yoono, building and maintaining core microservices for their people intelligence pipeline – including an article matching service, an AI-powered summarization service, and an internal observability platform adopted as the team's primary tool for diagnosing pipeline regressions.

*Junior Software Engineer* May 2024 – Jun 2025

  - **Internal RAG Search Platform:** Built an LLM-powered search platform using Retrieval-Augmented Generation (RAG) and LangChain, storing and querying embeddings in Chroma and Elasticsearch vector databases. Became the foundation for the SentientPro client product.
  - **Python to Node.js Migration:** Converted the Python query module into a production-grade Node.js microservice using TypeScript, Socket.io, and Express.

*Software Engineering Intern* Feb 2024 – May 2024

  - **Internal Tracking Tool:** Developed a Blazor Server tool with optimized backend services and D3.js charts for internal data visualization.
- **Yoono** *via Adappt* Remote - UK  
*Software Engineer (Embedded)* Oct 2024 – Present
  - **Article Matching Service:** Developed and maintained a core pipeline microservice that matches and ranks articles against individuals using personal and professional profile data, 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.
  - **Pipeline Observability & Testing Platform:** Designed and built an internal Next.js platform 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 in collaboration with the DevOps team.
  - **Time-Series Regression Tracking:** Automated syncing and processing of result files up to 300MB, generating time-series visualizations to pinpoint when and where pipeline degradation occurred across deployments.
  - **Article Diff Matching Tool:** Built a comparison tool that reruns the article matching pipeline against any deployed environment, surfaces the live GitHub branch, and produces a structured diff between runs for confident validation before promotion.
  - **Full Pipeline Comparison Tool:** Developed a persona-level diff feature comparing complete pipeline outputs across branches or environments, giving end-to-end visibility into what improved or degraded between deployments.
  - **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 – POC now being productionized.
- **SentientPro** *via Adappt* Remote - USA  
*Junior Software Engineer (Embedded)* Jun 2024 – Oct 2024
  - **Enterprise Search Application:** Built the client-facing Next.js application on top of Adappt's internal RAG search platform, enabling enterprise search across large SharePoint and Google Drive file sets. Integrated Microsoft Graph API and Prisma for database CRUD operations.
- **World Health Organization** *via Adappt* Remote - UK  
*Software Engineering Intern (Embedded)* Mar 2024 – May 2024
  - **WHO GOARN Mobile App:** Initiated a .NET MAUI Blazor Hybrid mobile app with API integration and a notifications service for the WHO GOARN web application.

## PROJECTS

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- **Claquette** –

*Real-time Multiplayer Web Game*

- **Multiplayer Movie Linking Game:** Built a real-time multiplayer game for Egyptian cinema, inspired by Cine2Nerdle. Players are matched into rooms and take turns linking movies through shared cast members – placing a movie on the board requires it to share at least one actor with the previous movie.
- **Link Mode:** Designed and implemented an additional competitive game mode where two players are given two target movies and race to build the shortest chain of movies between them using shared cast connections – fastest player wins.
- **Scalable Room System:** Engineered a flexible room system supporting 2–10 players with real-time state synchronization, turn-based play in the classic mode and concurrent race-style play in Link mode.
- **Live:** [claquette.app](https://claquette.app)

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

*Python, Node.js*

*Oct 2024 – Jul 2025*

- **RAG Implementation:** Built a 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 built with Remix.js, React.js, and Monaco Editor – 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#, 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](https://github.com/EslamTamim/FcisArchive)

## SKILLS

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- **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

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