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EDUCATION

Beni Suef, Egypt Beni Suef University

Sep 2018 - July 2022

- Major: B.Sc. in Computer Science, Faculty of Computers & Artificial Intelligence.
- **GPA**: 3.30.
- Graduation Project: <u>ASAR</u> (Arabic Manuscript Analysis and Recognition system). An intelligent system for digitizing historical Arabic manuscripts.
 - Implemented word spotting and pattern recognition algorithms to convert complex Arabic text images into digital text.
 - Created a web application using Flask framework to provide a user-friendly interface for accessing the ASAR system.
 - Led the team in the development and implementation of the ASAR system.

PROFESSIONAL WORK EXPERIENCE

Software Engineer

SilverKey Technologies

Oct 2021 - Present

- Designed and developed highly scalable and secure financial services for Taly's digital payment projects.
- Implemented the SOAP protocol of **Meeza** digital network to handle wallet processing in Egypt, achieving certification from Egyptian Bank.
- Developed a quality monitoring system (**QMS**) for the Ministry of Education and Technical Education (**MoETE**) in partnership with <u>GIZ</u>.
- Implemented complex business solutions to address the needs by building distributed systems using the BFF pattern.
- Implemented web services using different protocols such as gRPC, SOAP, and RESTful APIs.
- Engaged with the UAT team and Security team to address their findings and resolve them.
- <u>Tech Stack:</u> .NET Core 8, OAuth2 with Keycloak, VueJs, LLBLGen, Blazor WASM and Server Side, xUnit, SQL Server, PostgreSQL, Docker, Open Telemetry (Jaeger), and Elastic Stack (ELK).

Software Developer, Intern

SilverKey Technologies

Jul 2021 - Oct 2021

- Developed and designed new features, resolved bugs for an employment system called <u>Labour Market Access Project</u> (<u>LMAP Admin</u>) to serve many of employment centers and job seekers in Egypt with partnership with <u>GIZ</u>.
- Built a Pizza ordering app to gain proficiency in .NET tools such as C# 10, ASP.NET Core 6.0, and Minimal APIs.
- Learned new technologies including LLBLGen ORM, Vue.js, FluentMigrator, PostgreSQL, MediatR, and CQRS Pattern.
- Gained knowledge about software quality, development models, and database design.

OPEN SOURCE CONTRIBUTIONS

EMVQR.NET

- Build and maintain <u>Nuget Package</u> for generating and parsing QR Codes for digital payments in .NET based on the <u>EMV(R) QR Code Specification Standards</u>.
- Repo Link: https://github.com/aboelkassem/EMVQR.NET

SurveyJS

- Add Arabic Language Support on both libraries <u>survey-creator</u> and <u>survey-analytics</u>.

PERSONAL PROJECTS

Listify

https://github.com/aboelkassem/Listify

Aug 2020 - Oct 2020

- Build a real-time web app that allows users to share their favorite music with other online people.
- Developed a streaming experience and currency system that make the platform interactive.
- Implemented Youtube API and Spotify API for requesting songs and playlists in the platform.
- Added payment integration with PayPal gateway API and profanity filter with PurgoMalum API.
- Integrated IdentityServer4 framework allowing users to authenticate in multiple ways.
- Tools used: ASP.NET Core 3.1, Angular 10, SignalR, EF Core, IdentityServer4, SQL Server, AutoMapper.

Chatting App

https://github.com/aboelkassem/ChattingApp

- Feb 2020 Mar 2020
- Created an app that enables users to follow and message each other by displaying and editing their profiles.
- Designed RESTful backend server using ASP.NET Core 3.1 and frontend using Angular 9.
- Incorporated Cloudinary technology in the backend to handle the uploaded members' photos.
- Tools used: ASP.NET Core 3.1, Angular 9, EF Core, SQLlite, Heroku, Postman.

Foods

https://github.com/aboelkassem/Foods Restaurant

Dec 2019 - Jan 2020

- Designed and developed a restaurant management system that allows users to order food online.
- Implemented an admin panel for managing orders in different roles by ASP.NET Core MVC.
- Integrated Stripe payment gateway and SendGrid into the system for notifying users of order status.
- Utilized JavaScript libraries for good looking UI like Datatable.js, timepicker.js, sweetalert.js and font-awesome.
- <u>Tools used:</u> ASP.NET Core MVC 3.0, SQL Server, EF Core, jQuery, Bootstrap 4, AJAX.

SKILLS

- Programming Language C#, Go Lang, Python, TypeScript, JavaScript, HTML, CSS
- Back-End frameworks: ASP.NET Core, Flask, SignalR.
- Front-End frameworks: Blazor Web Assembly and Server Side, Vue, Angular, Bootstrap, jQuery.
- Databases: Microsoft SQL Server, PosgreSQL, MySQL.
- ORMs: LLBLGen, Entity Framework Core.
- **Technologies**: Docker, Kubernetes, Elastic Search (ELK stack), Open Telemetry with Jaeger, and OAuth2 with Keycloak and Identity Server.
- Unit Testing: xUnit.
- **General Concepts:** Algorithms, Data Structure, Distributed Systems. Microservices, Service Oriented Architecture (SOA), CQRS Pattern, Solid Principles, Design Patterns, Database and System Design, Web Services, OWASP Web Security, Linux, Networking, and Agile Methodology.
- Service Communication Protocols: SOAP, gRPC, and RESTful APIs.
- Other Skills: Good technical writing and communication skills, self-motivation, perfect ability to meet deadlines.

LANGUAGES

- Arabic (Native)
- English (Excellent)