

EDUCATION

Cairo University <i>Bachelor of Science in Computer Engineering, Cumulative Grade: Very Good(GPA:3.3)</i>	Cairo, Egypt <i>Aug 2019 – Aug 2024</i>
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EXPERIENCE

Deep learning workshop <i>Fundamentals of Deep Learning: From NVIDIA</i>	
<ul style="list-style-type: none">Developed proficiency in implementing and training deep learning models using popular frameworks such as TensorFlowExperienced in leveraging pre-trained models as a starting point for deep learning tasks, understanding how to fine-tune and transfer learning by reusing pre-learned features from these models.Proficient in utilizing data augmentation techniques to enhance training data for deep learning models, including applying transformations such as rotations, translations, scaling, and flipping to augment the dataset.	

TECHNICAL SKILLS

Languages	: C/C++, python, JavaScript, TypeScript, java
Frameworks	: React.js, Express, Node.js, Next.js
Libraries	: React Router, MaterialUI, Redux, React Query
Databases	: MongoDB, MySQL, SQLite

PROJECTS

<u>RedditX</u>	<i>React.js, React Router, Styled Components, Firebase, Git</i>	Source Code
<ul style="list-style-type: none">Developed the front-end of RedditX, a clone of Reddit using React, React Router, and Styled Components.Collaborated with the back-end developers to ensure smooth communication between the front-end and back-end using REST API calls via Axios.Conducted comprehensive unit tests for front-end components using Jest and React Testing Library, ensuring quality and stability of the codebase.Implemented responsive design principles to ensure optimal user experience on different screen sizes		
<u>ShopME</u>	<i>React.js, Redux, Material UI, React Router, Figma</i>	Source Code
<ul style="list-style-type: none">An e-commerce web application built with React.js, Redux, Material UI, and React Router, featuring user-friendly designs created using Figma.Utilized Figma for designing the user interface, gaining experience in creating visually appealing layouts for the application.Gained hands-on experience in implementing React Redux, managing application state efficiently throughout the project.Leveraged React Query to handle data fetching and caching, improving the performance of the application.		
<u>Bloggy</u>	<i>Next.js 13, NextAuth, Tailwind, MongoDB, Mongoose</i>	Source Code
<ul style="list-style-type: none">Developed a blog application using Next.js 13 with app directory routing. .Utilized Tailwind CSS for responsive and visually appealing styling.Implemented authentication and authorization using next-auth.		
<u>shop</u>	<i>Node.js, Express, Mongoose, MongoDB</i>	Source Code
<ul style="list-style-type: none">Developed a full-stack e-commerce application using Node.js, Express.js, and MongoDB.		

- Designed and implemented a robust user **authentication system** with login, sign up, and reset password functionality, **utilizing session** storage to ensure secure user sessions.
- Utilized the **Mongoose** framework to create models and schemas for MongoDB, enabling efficient data storage and retrieval.
- Implemented input validation and authorization to ensure users only have access to features they are authorized to use, improving website security and user experience.

NVIDIA workshop projects

Tensorflow, keras, pandas

[Source Code](#)

- Applied deep learning techniques to solve image classification problems, including the MNIST dataset and American Sign Language (ASL) hand gesture classification.
- Utilized the VGG16 pretrained model for image classification tasks, differentiating between fruits and recognizing specific objects.
- Developed and implemented recurrent neural networks (RNNs) for sequence data analysis, predicting words in sentences for natural language processing tasks.

OS-Scheduler

C, Linux

[Source Code](#)

- Utilized an operating system scheduler and Memory Management that scheduled different processes using the Shortest Remaining Time Next (SRTN), Highest Priority First (HPF), and Round Robin algorithms.
- Worked In both algorithms and Memory management

Search Engine

java, SQLite

[Source Code](#)

- Build Search Engine using mainly three components Crawler, Indexer and Ranker
- Worked on the Ranker to ensure that the best options were returned to the user

License plate recognition

opencv, sklearn

[Source Code](#)

- Applied preprocessing techniques using **opencv** to extract license plates from car images, improving character extraction accuracy.
- Utilized Histogram of Oriented Gradients (HoG) for effective feature extraction.
- Trained a Support Vector Machine (SVM) model to accurately classify license plate characters.

Blog App

React, React Router, JSON server

[Source Code](#)

- Developed a responsive front-end application using **React and React Router**, providing a seamless user experience for end-users while browsing the blog app.
- Implemented JSON as the file system database for the project, utilizing **JSON server** for data retrieval and updates using the Fetch API.

Expenses Tracker

React, CSS

[Source Code](#)

- Built a responsive and user-friendly expenses tracker single-page web application using React and CSS.
- Implemented an easy-to-use interface that enables users to add, categorize and track their expenses, providing a seamless user experience..

CERTIFICATIONS

- [Fundamentals of Deep Learning: From NVIDIA](#)
- [ECPC - 2022](#)
- [Supervised Machine Learning: Regression and Classification](#)
- [Advanced Learning Algorithms](#)