Mohammed Abdalla

Full-stack software developer, entrepreneur and mechatronics engineer.

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PROFESSIONAL EXPERIENCE

Sai e-services, Sudan — *Founder, Lead Engineer*

July 2019 - PRESENT

Architected a digital eCommerce platform aimed at improving and empowering entrepreneurs in a unique national economic landscape.

- Managed, built, tested, debugged, and deployed both the front-end client, a progressive web application (PWA) deployed as a trusted web application (TWA), and back-end REST API and database.
- Hosted over 1,000 searchable products across a variety of categories all with an SEO strategy.

African Union Commission, Ethiopia — *Data & Systems Admin.*

May 2018 - July 2019

Managed the data, systems and integrated geoportal for the Global Monitoring for Environment and Security & Africa (GMES) programme.

- Proposed an implementation roadmap, architecture and technical documentation for four tools: web platform, eLearning platform, continental geoportal, forum.
- Lead the early development and prototyping of the first three of the project's platforms.

Udacity, Remote — *Independant Consultant*

October 2017- Jan 2019

Utilized specialized knowledge in the fields of android development (Java) & self-driving (autonomous) cars and my strong communication skills to provide project reviews, code reviews and student other support services.

- Reviewed and guided over 250 student applications with a perfect feedback score of 5 stars and contributed to quality testing new unreleased courses.

EDUCATION

University of Jordan, Jordan — *M.Sc. Renewable Energy*

SEPTEMBER 2017 - PRESENT

A deep understanding of production, generation, storage, and the transmission of renewable sources of energy with advanced knowledge in power systems management.

SKILLS & FRAMEWORKS

Full-stack, Frontend, Backend, React JS, Redux, Next.Js, Node.JS, NPM, SPA, Express, PWA, TWA, NoSQL, MongoDB, Git, JavaScript, HTML5, CSS3, Python, C++, Java, XML, Flask, Linux, PostgreSQL,MySQL, SQLite, Android, Apache, PM2, NGINX, Azure, AWS, GCP, Firebase, TDD, AI, Keras, OpenCV, Agile, Deep Learning, Computer Vision, Machine Learning, ROS, Tensorflow, Notion, Vercel

AWARDS

Best Overall Design Project Award, UCSI University, Kuala Lumpur, MY

CERTIFICATES

IELTS Band 8.0, British Council, September 2021

Full Stack Web Developer Nanodegree, Udacity, 2019

Self-Driving Car Nanodegree, Udacity, 2017

Android Basics by Google Nanodegree, Udacity, 2016

LANGUAGES

English - Fluent

Arabic - Fluent

UCSI University, Malaysia — *B.Eng. (Hons) Mechatronic Engineering*

JANUARY 2011 - JANUARY 2016

An interdisciplinary branch of engineering that focuses on the integration of mechanical, electronic and electrical engineering systems.

PROJECTS

Altulumba Station Status App — *ReactJs / Material UI / NodeJS / ExpressJS / NGINX / PM2 / MongoDB / EC2 / WebPush*

A crowdsourced gas station finding app. During a time of extreme fuel shortages, this app was created to source and spread information regarding the location and availability of fuel across the country. Designed as a PWA for the speed of design and shipment as well as cross-platform support to over 10,000 users.

Airbnb Clone —*ReactJS / NextJS / MapBox / TailwindCSS*

An Airbnb UI clone with functioning date range selection, navigation transitions, Map view with pinned results and fully responsive UI.

Google Docs Clone —*ReactJS / NextJS / DraftJS / TailwindCSS / Firebase / Next-Auth*

A fully responsive Google Docs clone designed with DraftJS, a WYSIWYG rich text editor tool. The deployment utilizes Firebase authorization options for user authentication.

Uber Clone —*React Native / Expo / Redux / Google APIs*

An Uber UI clone with search and routing functionalities powered by the Maps APIs from Google. Developed using React Native for its cross-platform deployment and mobile first approach.

Didi Safety Challenge —Linux / *ROS / C++ / Python / OpenCV*

Built a Keras convolutional neural network classifier and another ROS node in Python to consume the cluster images and determine whether or not each is a vehicle. Achieved a top-50 (44th) score on the Udacity DiDi Challenge leaderboard, from among thousands of entrants.

Udacity's Carla Autonomous Vehicle —Linux / *ROS / C++ / Python / OpenCV / Keras / Scipy*

Designed the Behavioural Planning node (ROS) for Udacity's Self-Driving Car "Carla" as a part of team OSCAR. Implementing a behavioral pipeline for the core logic and path-planning moving the vehicle integrating the output of the perception nodes.

STRENGTHS

Commitment to Lifelong Learning

Oral and Written Communication

Interdisciplinary Team Building