

AHMED ELDAMATY

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Searching for opportunities in the fields of Telecommunications or Data Science.

EDUCATION

University of Science and Technology, Zewail City, Egypt

Sep 2017 - July 2022

B.Sc. in Communications and Information Engineering

GPA: 3.40/4.0

Graduation Project: Joint Communication-Radar System Implementation

Selected Courses: Advanced Wireless Communication Systems - Digital and Wireless Communications - Mobile Communications Technologies- Wireless Sensor Networks and IoT - Neural Networks and Deep Learning - Machine Learning - Information Security and Encryption - Linear and Nonlinear Programming.

Al Saadeya Military Secondary School, Giza, Egypt

2016 - 2017

Math section

STEM high school for boys, 6th of October, Giza, Egypt

2014 - 2016

EXPERIENCE

Software Development Center, Giza Systems

Sep 2022 - present

Data Scientist

- Worked with data team on several projects using big-data tools like PySpark, Hadoop and Kafka. Also worked with RestAPI and Django. I have some experience using Airflow. Investigated in different applications of ML to implement new features in the running projects. Worked with NoSQL Arango and Neo4j Graph Database and Graph ML. Good experience in timeseries analysis.

CIE Department, Zewail City

Oct 2022 - Jan 2023

Teaching Assistant

- Worked as a Teaching Assistant for Digital Signal Processing Course for semester Fall-2023

CIE Department, Zewail City

Aug 2021 - Oct 2021

Research Intern

- Conducted a research about using DNN to optimize power allocation coefficients in MIMO systems working with NOMA communication scheme according to the CSI feedback of the users in a cell.

TECHNICAL SKILLS

Programming: Python, C, C++, C#

ML Frameworks: Tensorflow, Keras, Scikit-learn, Auto-Sklearn

SW Frameworks: Django, Airflow, Spark, Kafka, NiFi, Alteryx.

Software & Tools: Matlab, LabView, Simulink, Colab, Pycharm, Wireshark, eNSP, PowerBI

Languages: Arabic (Mother Tongue), English (Professional).

CERTIFICATIONS

HUAWEI HCIA Routing & Switches, HUAWEI

Sep 2020

- Introduces basic concepts and basic network knowledge of routing and switching. Covered the main protocols used in L2 & L3 computer networks in addition to management and configuration process of Huawei Devices.

IELTS Academic, British Council in Cairo

Nov 2022

- Reading: 9.0, Listening: 8.5, Speaking: 7.0, and Writing: 6.5. Band score 8.0; Very good user of English.

Microsoft Certified: Power BI Data Analyst Associate, Microsoft

Nov 2023

PROJECTS

Crime Intelligence, Public Security Sector, Saudi Ministry of Interior.

- Integration and Migration of data from MOI's platforms to a new platform.
- Build different advanced and predictive analytics to predict crime rates and crime activity of criminals.
- Building PowerBI dashboards for displaying results and analytics of different ML use cases. Give resource allocation inspects base on those analytics.

Intelligent Traffic System, Giza Systems.

- Benchmarked different ML models of ARIMA, RFR, and GNNs. Deployed the best model and integrated with an API.

Investigation of Non-Intrusive Load Management Models.

- Done a literature review about the problem of NILM. Selected 4 models to benchmark and validate. Models included are RFC, 1D-CNN, and BERT4NILM.

Implementation of a simple interpreter using python.

- Implemented an interpreter using python to parse and evaluate user defined logical and mathematical KPIs.

Implementation of IEEE 802.11a WLAN Physical Layer with OFDM using MATLAB

- The IEEE 802.11a Wireless LAN standard which operates in the 5 GHz unlicensed band occupying a 20 MHz bandwidth is based on OFDM. The main goal of the project is to implement the OFDM system specified in the 802.11a standard.

Software Design and Implementation of Selected Functionalities in the LTE EPC.

- Implemented the attach and detach process defined by 3GPP standards in the LTE EPC system using python.

Implementation of digital modulation and demodulation used in 4G and DVB-C systems.

- Used different constellations and modulation techniques like QAM and PSK to send and receive messages using MATLAB and LabView. Also, used USRP to test in real life scenarios.

Abstractive Text Summarization Using Deep Learning

- Usage of LSTM Autoencoder architecture to perform abstractive text summarization.

EXTRA-CURRICULAR

Volunteer at Resala Charity, Giza, Egypt

May 2018 - Nov 2018

Treasurer at Zewail City IEEE

Sep 2020 - Jun 2021

Instructor at Zewail City AppX workshop

Oct 2021

PR member at Zewail City Science Festival

Feb 2018 - May 2018

REFERENCES

Samy S. Soliman, Ph.D., MIEEE

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