

# DEEMA ABDULAZIZ

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## EDUCATION

### Columbia University

New York, NY

*MSc. in Computer Science, Machine Learning Track, GPA:3.93/4*

Dec 2022

Relevant Coursework: Analysis of Algorithms, Natural Language Processing, User Interface Design, Empirical Methods Data Science, Databases

### King Saud University

Riyadh, Saudi Arabia

*BSc. in Information Technology*

Jun 2015

Ranked First in KSU Class of 2015, First-Class Honor, GPA: 4.99/5

Dissertation "Mr. Saud: NAO Robot for Kindergarten" | Dean's List of Outstanding Students | Ranked First in AEC's Best Graduation Project Prize

## WORK EXPERIENCE

### Osrah Company

Dammam, Saudi Arabia

*Software Engineer*

Sep 2019 – Sep 2021

- Led the technical team in Osrah company (a startup company supports small businesses)
- Developed (Rabet) a central directory for small business providers and (Artizana.store) a marketplace for handmade products
- Signed a contract with social development ministry to cover first year subscriptions of +2500 stores on Artizana.store

### College of Computer and Information Sciences, IMSIU

Riyadh, Saudi Arabia

*Teaching Assistant*

Feb 2019 - Sep 2021

- Taught undergraduate courses as: Operating systems, Computer networks, and Wireless networks +30 students/class
- Assisted in supervising 10 undergraduate dissertations (machine learning, computer vision and security related projects)
- Awarded IMSIU Faculty Scholarship

### General Organization for Social Insurance

Riyadh, Saudi Arabia

*Business Intelligence (BI)/ ETL Developer*

Apr 2017 - Feb 2019

- Engineered GOSI database that covers around 8 million employees' data
- Implemented Data warehousing and modeling, ETL development, BI dashboard building, BI Testing, Data Quality, and Data Visualization on GOSI data
- Delivered dashboards and required statistics for around 1000 external requests on private sector employees' data
- Developed ETL procedures for data extraction and transformation

### General Organization for Social Insurance

Riyadh, Saudi Arabia

*Java Developer*

Jul 2016 - Apr 2017

- Developed GOSI's website, backend (Java EE) and frontend (Java server pages JSPs)

### Elm Company

Riyadh, Saudi Arabia

*Software Test Engineer*

Sep 2015 - Jun 2016

- Conducted Web services and API testing
- Conducted Functional testing and UI testing on two countrywide systems used by more than 100 thousand users
- Analyzed business requirements and prepared test cases, automation tests and tests scenarios
- Reported and verified bugs, certified releases, and deployed new builds

### King Faisal Specialist Hospital & Research Centre

Riyadh, Saudi Arabia

*Research Assistant Intern*

Aug 2015 - Sep 2015

## TECHNICAL SKILLS

**Languages** Python, PL/SQL, Java, PHP, JavaScript, CSS, R, C#

**Visualization** OBIEE, Oracle BI Publisher, Oracle Data Integrator, Tableau, Power BI, Alteryx

**Tools** Git, SoupUI, Toad, Figma, Balsamiq

## MAIN PROJECTS

**Neural Interactive System with Qingyang Wu NLP Lab @Columbia**

NLP, Databases

**Data Augmentation using GANs for COVID19 classification in chest X-rays images**

Imbalance Data, GANs

**Detecting Facial Manipulation in Deepfake Videos Using Neural Networks**

Deep Learning (CNN), Image Processing

**Word Sense Disambiguation Using Swarm Intelligence Techniques**

NLP, Swarm Intelligence

- A Survey on Recent Approaches

**Mr. Saud: NAO Robot for Kindergarten**

Robotics

- Programmed NAO robot to support kindergarten edutainment through providing activities and games. And enabling teachers to review students' progress through an android mobile application and a web interface

## PUBLICATIONS

- The experience of developing Mr. Saud educational system using NAO humanoid robot, Muscat
- Using NAO Humanoid Robot in Kindergarten: A Proposed System, Hualien

ICTA 2017

ICALT 2015