

# AYESHA MUHAMMAD AKHTAR

Computer Engineer

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Highly dedicated individual, fluent in several programming languages with experience in machine learning and mobile app development currently employed as a Product Analyst. Seeking to pursue higher education for Master in the field of Computer Science whereby I could advance and gain invaluable experience in the field of Natural Language Processing and Computer Vision, as well as enhance on personal skills and abilities.

## CORE SKILLS

**Programming Skills in:** Java, C, Python, Bash, SQL, R Language, Assembly Language, JavaScript, CSS, HTML5, VHDL, jQuery, AngularJS

**Softwares:** LaTeX, MATLAB, Eclipse Java, NetBeans IDE 8.2, WebStorm, PyCharm, AndroidStudio, Jupyter, LabView, keiluvision 5, Multisim, RStudio, Altera Quartus II, EasyEDA, InVision

**Adobe Suite:** Photoshop, InDesign, Illustrator, AdobeXD

**Microsoft Office:** Word, Outlook, MS Excel and PowerPoint

## EDUCATION & CERTIFICATIONS

### ABU DHABI UNIVERSITY (ADU), UAE

2015 - 2019

Bachelor of Science in Computer Engineering, ABET-ACCREDITED

- Awarded Honors scholarship of 40% upon joining. Maintained CGPA of 3.9+ since first semester, at WASC internationally accredited university
- Recipient of the Dean's List Award for 7 semesters
- Graduated with Summa Cum Laude Honors [**Graduating CGPA - 3.96**]

### Graduation Project

Assessment of Defects in Photovoltaic (PV) Modules using Thermal Imaging & AI

### Related Coursework

Artificial Intelligence

Big Data

Mobile Applications

Data Communications & Networks

Database Management Systems

Embedded Linux System Design

Object Oriented Programming

Operating Systems

Distributed Information Systems

Microprocessors & Firmware

Programming

Advanced Digital System Design

Data Structures & Algorithms

Signals & Systems

## PROFESSIONAL EXPERIENCE/VOLUNTEERING

### PRODUCT ANALYST – Saal.ai, Abu Dhabi

Oct 2020 – Present

Received promotion within 2 months of being hired as a RA. Along with prior RA responsibilities, my work also includes:

- Oversee design, development and delivery cycle, define product roadmap, knowledge graphs, user journeys, backlog requirements, and collaborate with cross-functional teams.

- Carry out product and market research, data analysis, data visualization, prototyping and product testing.

**RESEARCH ASSISTANT (RA) – Saal.ai, Abu Dhabi** **Aug 2020 – Oct 2020**

- Research into available datasets, AI models, architectures, and technologies to understand the development pipeline for AI modules.
- Contributions in the AI division and development of various NLP/NLU based products.
- Conducting competitor analysis and market research of ML products.
- Providing product & content support for ongoing DOH COVID-19 chatbot.

**INTERN – Saal.ai, Abu Dhabi** **Sept 2019 – Aug 2020**

- Application/Product Research and Design to utilize and showcase in-house AI modules.
- Data gathering and scraping for NER, frontend, and backend development (flask rest API implementation) to demonstrate NLU capabilities.
- Product & content support for COVID-19 Health Advisory Platform and Bilingual Cognitive Virtual Assistant (CVA Chatbots) in collaboration with Department of Health (DOH).

**DIRECTOR OF COMMUNICATIONS – ADU Student Council** **Aug 2018 – July 2019**

Responsible for the handling of Student Council social media accounts, serving as a communicator between the council and the departments around ADU and providing a platform through which students could voice their opinions and concerns. Also responsible for promoting events around campus and advertising the proceedings of the council.

**EVENTS MANAGER – IEEE ADU Student Branch** **Sept 2017 – Jan 2019**

Responsible for managing and executing IEEE related workshops and events along with working closely with all the necessary departments to ensure the on-site events and activities are executed as per planned.

**PEER MENTOR – ADU Student Affairs** **Dec 2017 – Apr 2019**

Guiding and helping freshmen through their first academic year to successfully bridge the gap between high school and university life.

**DESIGNER – ADUVoice Magazine** **Sept 2017 – Apr 2019**

Responsible for regularly designing articles for the official student-run magazine.

**EVENTS PROMOTER – ADU Student Council** **Jun 2017 – Aug 2018**

Responsible for promoting the student council events through various class visits, announcements, posters, and the social media accounts of student council to garner a larger audience for each event. Also having worked as a part time designer.

**SENIOR MENTOR – ADU Academic Success Center** **Jan 2016 – Jan 2018**

Responsible for guiding and tutoring peers in courses they faced difficulties via one-on-one and group sessions.

**SCIENCE COMMUNICATOR – Abu Dhabi Science Festival, ADEK** **Nov 2016**

Organized and delivered various science workshops and exhibitions for the visitors.

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**PROJECTS**

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- ◆ **Embedded Linux System Design** - Laser Human Counter using RaspberryPis
- ◆ **Dubai Maker Faire Hackathon** - Smart School Supplies Vending Machine using Ebot
- ◆ **Embedded Networks** - Laser Tag Game Using Arduino and AdaFruit Feather
- ◆ **Microprocessors & Firmware Programming** - Sumo Wrestling Robot
- ◆ **Advanced Digital Sys Design** - Amusement Park Ride Sys. using FPGA (Altera Cyclone IV)
- ◆ **Mobile Applications** - Book Swap Mobile Application

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## **ACHIEVEMENTS & COMPETITIONS**

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- ◆ **2<sup>nd</sup> Place Winner in Dubai Maker Faire Hackathon – Hamdan Bin Rashid Al Maktoum Foundation For Distinguished Academic Performance**
- ◆ **Participated in UAE Think Science 2019:** Self-Maintaining Photovoltaic Farm
- ◆ **Participated in 7<sup>th</sup> UAE Undergraduate Research Competition 2019:** Assessment of Defects in Photovoltaic (PV) Modules using Thermal Imaging & AI
- ◆ **Participated in Emirates Environmental Group (EEG) Inter-College Environmental Public Speaking Competition 2016:** Sustainable Development Goals 2016
- ◆ **Participated in ADU English Debate Competition 2016**