



Ammar Alhaj Ali

Doctoral of Philosophy (Ph.D.)

Tel: +965 960 82 510
Email: aali@tech-ai.net
Website: http://tech-ai.net/
Location: Kuwait, Kuwait City
Date of birth: 28-2-1977



CAREER PROFILE

- Artificial Intelligence and Machine Learning Engineer specialized in state-of-the-art Natural Language Processing and Computer Vision techniques using different deep learning frameworks such as TensorFlow and PyTorch.
- I ranked in top places in Kaggle platform (Highest rank 30 of 271605 global data scientists) as notebook Grandmaster.
- Rich practical experience in NLP, NN, CNN, U-Net, Transformers, YOLO, Detectron2, and Mask R-CNN.

QUALIFICATIONS

Doctoral
SEP 2016 - SEP 2021

PhD in Engineering Informatics from Tomas Bata University in Zlin (5 years), Czech Republic.

Bachelor
SEP 1996 - SEP 2002

Bachelor's degree in computer engineering (5 years), Aleppo University, Syria.

JOB EXPERIENCES

Co-Founder & Head of AI
DEC 2022 - PRESENT

Kenda AI - Jordan (*Part-time*)

- Our vision in Kenda AI is to exploit Artificial Intelligence in education.
- My role as Head of AI is to develop a vision and strategy for delivering AI technologies across our applications and solutions, and lead a team of experts in accelerating AI solutions.

Data Science Lead Instructor
NOV 2022 - PRESENT

Coded - Kuwait (*Part-time*)

My role as Lead Instructor is to develop and update the Data Science course, ensuring the course content remains relevant, and teach and support students and team members to develop their skills in data science and artificial intelligence.

AI RESEARCHER
SEP 2021 - PRESENT

Kuwait University - Kuwait (*Part-time*)

My main responsibility as a research associate is to work with a research group to build a deep learning model for segmentation of newspaper elements using Deep Learning

MACHINE LEARNING ENGINEER & DATA SCIENTIST
SEP 2020 - PRESENT

KAGGLE (*Part-time*)

- Kaggle Kernel Grandmaster:** Highest rank 30 out of 271605 global users, I created 90 kernels with 15 Gold medals, 13 Silver medals and 24 Bronze medals with a total of 2532 upvotes and 7004 forks.
- Kaggle Datasets Expert:** Highest rank 194 out of 48688 global users, I created 22 datasets with 5 Bronze medals.
- Competitions Expert:**
 - Top 8% (Solo Bronze Medal) in **CommonLit Readability Prize** Competition.
 - Top 9% (Solo Bronze Medal) in **Riid Answer Correctness Prediction** Competition.
 - Top 17% in **SIIM-FISABIO-RSNA COVID-19 Detection** Competition.

UNIVERSITY LECTURER
FEB 2015 - FEB 2021

Computer Science Department, College of Basic Education – Kuwait (*Part-time*)

I taught many courses in computer science.

SENIOR WEB DEVELOPER
AUG 2005 – Dec 2022

Ministry of Education – Kuwait (*Full-time*)

I work as a senior web developer specializing in front-end and back-end development (full-stack), and responsible for the coding, creating, and designing websites and various online applications.

LECTURER

JUL 2009 - MAY 2013

High Studies Institute – Kuwait (Part-time)

I taught the following courses:

- Diploma of web development and Diploma of software development.

I taught: ASP.NET, C#, VB, PHP, JavaScript, JQuery, HTML, CSS, MYSQL, SQL Server, and Crystal Report.

COMPUTER ENGINEER

FEB 2003 - JUN 2005

Syrian Railways Corporation – Syria (Full-time)

- I developed the official website of the Corporation.
- I was the project manager of the data bank project.

PROJECTS

1-Arabic Sentiment Analysis using transformers. (See project)

2- Identification of the Arabic Dialects using Transformers. (See project)

3- Classification of Arabic News using Transformers. (See project)

4-Instance Segmentation of Newspaper Elements Using Deep learning.

5- COVID-19 Detection from Chest X-Ray Images. (Yolov5: See project, Detectron2: See project)

6- Brain Tumor 3D Classification from MRI using 3D & 2D CNN. (See project)

7- Brain Tumor 3D Segmentation from MRI Images Using Deep Learning. (See project)

8- Tomato Leaf Diseases Detection Using Deep Learning. (See project)

SELECTED PUBLIATIONS

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1. **Ali, A.A.**, Katta, R., Jasek, R., Chramco, B., Krayem, S. (2023). **COVID-19 Detection from Chest X-Ray Images Using Detectron2 and Faster R-CNN.** In: Silhavy, R., Silhavy, P., Prokopova, Z. (eds) Data Science and Algorithms in Systems. CoMeSySo 2022. Lecture Notes in Networks and Systems, vol 597. Springer, Cham.
 2. **Ali, A.A.**, Katta, R., Jasek, R., Chramco, B., Krayem, S. (2023). **Sub-region Segmentation of Brain Tumors from Multimodal MRI Images Using 3D U-Net.** In: Silhavy, R., Silhavy, P., Prokopova, Z. (eds) Data Science and Algorithms in Systems. CoMeSySo 2022. Lecture Notes in Networks and Systems, vol 597. Springer.
 3. **Ali, A. A.**, Chramcov, B., Jasek, R., Katta, R., Krayem, S., & Kadi, M. (2021, October). **Detection of Steel Surface Defects Using U-Net with Pre-trained Encoder.** In *Proceedings of the Computational Methods in Systems and Software* (pp. 185-196). Springer, Cham.
 4. **Alhaj Ali, A.**, Chramcov, B., Jasek, R., Katta, R., Krayem, S., & Awwama, E. (2021, October). **Tomato Leaf Diseases Detection Using Deep Learning.** In *Proceedings of the Computational Methods in Systems and Software* (pp. 199-208). Springer, Cham.
 5. **Ali, A. A.**, Chramcov, B., Jasek, R., Katta, R., & Krayem, S. (2021, April). **Classification of Plant Diseases Using Convolutional Neural Networks.** In Computer Science On-line Conference (pp. 268-275). Springer, Cham.
 6. **Ali, A. A.**, Vařacha, P., Krayem, S., Žáček, P., & Urbanek, A. (2018). **Distributed data mining systems: techniques, approaches and algorithms.** In MATEC Web of Conferences. EDP Sciences.
 7. **Ali, A. A.**, Vařacha, P., Krayem, S., Jašek, R., Žáček, P., & Chramcov, B. (2018). **Modeling Of Distributed File System In Big Data Storage By Event-B.** In MATEC Web of Conferences. EDP Sciences.
 8. Capek, P., Jasek, R., Kral, E., **Ali, A. A.**, & Senkerik, R. (2018, December). **Cross Platform Configurable ERP Framework.** In 2018 International Conference on Computational Science and Computational Intelligence (CSCI) (pp. 1456-1457). IEEE.

[To see full publication list](#)

SELECTED LICENSES & CERTIFICATIONS

1-Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization - DeepLearning.AI

The certification issued Jan 2021 -Credential ID: TALS96R2M8AA ([See credential](#))

2-Applied Machine Learning in Python - Michigan University

The certification issued Aug 2020 - Credential ID: MA4PTU9JV698 ([See credential](#))

3-Neural Networks and Deep Learning - DeepLearning.AI

The certification issued Sep 2020 - Credential ID ZJLB72TXAAVE ([See credential](#))

4-Big Data Modeling and Management Systems - California, San Diego University

The certification issued Jun 2020 Credential ID: TZTJ3MJ75H7U ([See credential](#))

5-Introduction to Data Science in Python- Michigan University

The certification issued Jun 2020-Credential ID HNCZCECD8Z78 ([See credential](#))

6-Machine Learning With Big Data - California, San Diego University

The certification Issued Jul 2020- Credential ID E9SFWJULJL73 ([See credential](#))

7-Using Databases with Python - Michigan University

The certification issued Jul 2020 - Credential ID: DPBCL48SAPJJ ([See credential](#))

8-Using Python to Access Web Data- Michigan University

The certification issued Jun 2020-Credential ID: CJG7HGTEGJ93 ([See credential](#))

9-Managing Big Data with MySQL-Duke University

The certification Issued Jul 2020-CredentialID: QCYK3V6XEU7L ([See credential](#))

10-Google Cloud Platform Fundamentals: Core Infrastructure – Google

The certification Issued Jun 2020 – Credential ID: CPD5RFPXEBQ7 ([See credential](#))

11-NLP: Twitter Sentiment Analysis- Guided project - Coursera

The certification or issued Oct 2020 -Credential ID: WWKLB3ZY8XGR ([See credential](#))

12-Analyze Text Data with Yellowbrick- Guided project - Coursera

The certification or issued Oct 2020-Credential ID: QLQF5CF3NK2A ([See credential](#))

13-Mining Data to Extract and Visualize Insights in Python - Coursera

The certification or issued Sep 2020-Credential ID: 4ZMA6UH2KB EY ([See credential](#))

14-Mining Quality Prediction Using Machine & Deep Learning - Coursera

The certification or issued Sep 2020-Credential ID: F58W6YYS3QTW ([See credential](#))

15-Introduction to Topic Modeling for Business - Coursera

The certification or issued Oct 2020-Credential ID: PEJ3AYFRQQDH ([See credential](#))

16-Perform Sentiment Analysis with Scikit-learn - Coursera

The certification or issued Oct 2020-Credential ID: XSBMJXGFR LGG ([See credential](#))

17-Sentiment Analysis with Deep Learning using BERT - Coursera

The certification or issued Oct 2020-Credential ID: HVP9LSGXKJYQ ([See credential](#))

18-TensorFlow for AI: Computer Vision Basics - Coursera

The certification or issued Oct 2020-Credential ID: 8UY98MRD8T4L ([See credential](#))

19-Visualizing Citibike Trips with Tableau - Coursera

The certification or issued Oct 2020-Credential ID: 8UG87Y496STP ([See credential](#))

AWARDS

1-Award Sheikh Salem Al Ali Al Sabah Informatics- (2017)

- **Project name:** Mubader E-learning project - <http://sch-kw.com/>.

2-Award of Kuwait Foundation for the Advancement of Sciences - (2015)

- **Award name:** Kuwait E-Content Award.
- **Project name:** Capital educational website - <https://www.capital.edu.com/>.

SUMMARY

Data Science & Machine Learning

- Fluency in **Python** with working knowledge of **machine learning & Statistical libraries**.
- Good experience in data **exploratory**, data **visualizations**, feature **selection**, data **analysis** using different techniques in Python.
- Strong experience working with different data types and different formats such as **CSV, JSON, and XML**
- Good experience in **Data preparation**, which includes cleaning and transforming raw data prior to processing and analysis.
- Strong Knowledge machine learning library **Scikit-Learn, NumPy, Pandas, Seaborn, and OpenCV**.
- Experience in processing real data and **building ML pipelines** end to end.
- Solid understanding and use of Machine Learning techniques and algorithms like **Random forest, Gradient boosting, CatBoost, Light GBM, XGBoost** to predict the outcomes.
- Strong experience working with and deep learning frameworks: **TensorFlow, Keras, and PyTorch**.
- Experience applying machine learning techniques to **NLP** problems.
- Experience in build and training **CNN, U-Net, U-Net 3D, Mask R-CNN, and Faster R-CNN** models using deep learning frameworks such as Keras and Pytorch.
- Experience with image **recognition, classification, and segmentation** using **computer vision** techniques.
- Good understanding of model **validation** processes and **optimizations**.
- Educational and professional experience in applying **Machine Learning** and **Data Mining** techniques to real problems with copious amounts of data.

Web development

- 19 years of professional experience in software **design, development, debugging, deployment, documentation** and **testing** of **Client-Server** and Web based Applications.
- Well-versed in business process **modeling**, business **improvement**, business system **analysis**, and developing responsive websites using **C#, ASP.NET, Blazor, JQuery**, and SQL skills.
- Designing and developing reports by **SAP Crystal Reports**.
- Extensive Knowledge with **.NET Framework** (All versions).
- Highly experienced with **SQL Server** and **MySQL**.
- Extensive Knowledge in **Visual Studio** (All versions).

Technical SKILLS

- Python, Java, C, C++, C#, and PHP.
- ASP.NET, Blazor, JavaScript, Web services, JQuery, AJAX, HTML, DHTML, CSS, CSS3, XML and ADO.NET.
- SQL Server and MySQL.
- Crystal Report.
- Jupyter, TensorFlow, YOLO, Detecton2, Keras, and PyTorch.

ADDITIONAL INFORMATION

Languages

- Arabic.
- English.

Ammar Alhaj Ali