Kaleem Ahmad

• Peshawar, Pakistan

in imkaleemahmad

"Dedicated to solving real-world problems and fostering wellbeing through technological advancements."

Education

BS The University of Agriculture, Peshawar, Pakistan, Computer Science 🗹 Oct 2020 - Sep 2024

- CGPA: 3.29/4.0
- Thesis Title: Prompt-Driven Image Analysis: Integrating Gen-Al for Segmentation, Object Transformation, and Cognitive Interpretation.
- Relevant Coursework: Data Structures and Algorithms, Artificial Intelligence, Database Systems, Operating Systems, Computer Networks, Cloud Computing, and Machine Learning.

Research Interests _

- 1. Image Processing.
- 2. Medical Imaging.
- 3. Generative AI.
- 4. Large Language Models.
- 5. Data Science and Big Data.

Projects _____

Prompt-Driven Image Analysis

- Developed a system using generative AI for complex image tasks like segmentation and transformation, with NLP integration for prompt-based analysis.
- Tools Used: GANs, PyTorch, etc.

3D Face Reconstruction Using Deep Learning Techniques & Real-Time Visualization

- Created a deep learning model to reconstruct 3D faces from 2D images, incorporating real-time feedback for dynamic visualization.
- Tools Used: PyTorch, TensorFlow, CNNs, WebGL Studio, PCA, ResNet, etc.

Nystagmus Detection through Frame-by-Frame Retina Tracking and Deep Learning Classification

- · Built a deep learning-based system for tracking and classifying retina movement, assisting in early detection of nystagmus.
- Tools Used: Deep Learning Models, Python, Vision Models, etc.

Early Detection of Eye Diseases Using the Segment Anything Model for Sclera Segmentation

- Developed a system using the Segment Anything Model (SAM) for sclera segmentation to aid early eye disease diagnosis.
- Tools Used: SAM by META, Image Processing Libraries, etc.

Dynamic Tutoring Platform with Interactive Language Learning

- Created an interactive platform allowing multimedia content embedding in PDFs to enhance language learning experiences.
- Tools Used: HTML, Bootstrap, JavaScript, TypeScript, etc.

Learn More 🗹

Feb 2024 - Aug 2024

Learn More 🗹

Dec 2023 - Feb 2024

Learn More 🗹

Oct 2023 - Dec 2023

Learn More 🗹

Aug 2023 - Sep 2023

Learn More 🗹

Jul 2022 - Feb 2023

Experience _

Data Analyst & Full-Stack AI Developer, Remote

Freelance Sep 2022 – Present

- Developed and refined predictive models using Python and R, achieving up to 98% accuracy in forecasting future sales trends. These insights allowed clients to make data-informed decisions for inventory and strategic planning, significantly improving resource allocation.
- Collaborated with clients to create custom, interactive data visualizations and dashboards in Tableau, Power BI, Streamlit, and Shiny, enabling clear representation of complex data and providing clients with intuitive tools for real-time insights and strategic adjustments.

Trainings & Certifications _____

Generative AI for Data Scientists Specialization, IBM | Coursera 🗹

Jan 2024

Focused on applying generative AI across text, code, image, audio, and video, emphasizing prompt engineering.

Data Analyst Associate, DataCamp | Serial No. DAA0019364717027 🗹

Apr 2023

• Gained advanced Python skills in data manipulation, visualization, and analysis with NumPy, pandas, and matplotlib.

Machine Learning Specialization, Stanford University, DeepLearning.Al | Coursera

Apr 2023

• Covered machine learning techniques for classification, regression, and recommendation systems, applied in computer vision and natural language processing.

IT Support Professional, Google | Coursera 🗹

Jan 2022

• Completed 100+ hours of training in troubleshooting, networking, and IT security fundamentals.

Certificate in IT (Web & Android Application Development), Government of Pakistan | NAVTTC 🗹

Mar 2021

• Developed an "Online Voting System" as a capstone project, showcasing web and software development skills.

Cybersecurity Specialization, The University of Maryland | Coursera

Nov 2020

• Mastered cryptography for secure digital communication.

Machine Learning Specialization, The University of Washington | Coursera ☑

Sep 2020

• Built foundational knowledge in predictive modeling with skills in regression, classification, and clustering.

Introduction to Programming IoT Specialization, The University of California | Coursera 🗹

Aug 2020

• Hands-on experience with Arduino and Raspberry Pi for IoT applications and networking basics.

Skills

Programming & Development: Python, R, Java, C++, C#, JavaScript, TypeScript, Kotlin, Go. Web (React, Vue, Angular, Node, Express) and mobile development (Flutter, Bootstrap).

Data Analysis & Visualization: Data manipulation (NumPy, pandas, Excel) and visualization (Tableau, Power BI, Streamlit, Shiny).

Artificial Intelligence & Machine Learning: Proficient in PyTorch, TensorFlow; experience with NLP, computer vision, reinforcement learning, and GEN-AI.

Database Management & Big Data: Skilled in MySQL, PostgreSQL, MongoDB, Cassandra, Hadoop, Spark.

Cloud Computing & DevOps: AWS, Azure, GCP; containerization (Docker, Kubernetes) and automation (Jenkins, Ansible).

Cybersecurity & Network Security: Knowledgeable in cybersecurity principles and secure digital environments.

Artificial Intelligence in Robotics: Applied AI in robotics; experienced with ROS.

UX Design & Prototyping: Sketch, Adobe XD, Figma, etc.

Blockchain & Cryptography: Understanding of blockchain (Solidity) and cryptography fundamentals.

Languages _

English

• **Proficient**: (IELTS Overall Band Score: 7.0, **CEFR Level**: C1).

• Listening: 6.5, Reading: 7.5, Writing: 6.5, Speaking: 7.0

TRF Number: 24PK508385AHMK015A.
Verify at: https://ielts.org/verify

Urdu (Native Speaker) **Pashto** (Mother Tongue)

References _

Dr. Asfandyar Khan, Head of Department, Assistant Professor (Ref. Letter)

Institute of Computer Science and Information Technology (ICS/IT), The University of Agriculture, Peshawar, Pakistan

Email: asfandyar@aup.edu.pk 🗹

Phone: +92 91 9221323 🗹

Profile URL: https://www.aup.edu.pk/staff/dr-asfandyar ☑ **Dr. Abdullah Khan**, Assistant Professor (Ref. Letter) ☑

Institute of Computer Science and Information Technology (ICS/IT), The University of Agriculture, Peshawar, Pakistan

Email: abdullah_khan@aup.edu.pk 🗹

Phone: +92 91 9221262 🗹

Dr. Irfan Mehmood, Associate Professor

Faculty of Management, Law, and Social Sciences, University of Bradford, United Kingdom

Email: i.mehmood4@bradford.ac.uk 🗹

Phone: +44 1274 232646 🗹

Profile URL: https://www.bradford.ac.uk/staff/imehmood4/ 2