Shouzab Khan

Data Analyst | AWS

Highly motivated and results-oriented Data Analyst with a strong foundation in data manipulation, analysis, and visualization. Proven ability to leverage Python libraries to extract insights from complex datasets and drive data-driven decision-making. Eager to contribute technical expertise and data science knowledge to optimize processes and support innovative solutions at AWS.

WORK EXPERIENCE

Intern Information Technology May 2024 – Sep 2024
Alabama Public Television | Birmingham, AL

- Implemented data infrastructure upgrades: Migrated accounting systems from Macola 7.1 to Macola 10, resulting in a 10% improvement in data accuracy and a 5% reduction in data processing time.
- Conducted ETL processes: Ensured clean, structured datasets for analysis and reporting, leading to a 15% increase in report accuracy.
- Utilized Microsoft Dynamics 365: Automated workflows for finance, HR, and engineering teams, improving process efficiency by 20% and creating detailed documentation for user training
- Gained hands-on experience with data transmission: Worked with radio frequency and microwave systems, ensuring reliable data flow for critical operations.

Networking Teacher Assistant May 2023 – Aug 2023
University of Alabama at Birmingham | Birmingham, AL

- Collaborated with teachers to plan and execute lesson plans, ensuring alignment with curriculum standards.
- Provided students with individual and small group support, reinforcing learning objectives and improving student understanding of networking concepts.
- Assisted around 80 students in developing educational materials to support diverse learning styles.
- Shadowed the professor for different lectures and assisted students with technical challenges.
- Worked on different projects with tight deadlines, demonstrating effective time management and project execution skills.
- Utilized various technological tools: Microsoft Teams for communication, Wireshark for network analysis, and Cisco Packet Tracer for network simulation.

Cloud and Infrastructure & Data Analysis Jan 2022 – Dec 2022
Systems Limited

- Provided L1 support for cloud infrastructure: Monitored systems, ensured data availability and reliability across

CONTACT

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GitHub Profile
LinkedIn Profile

SKILLS

Technical Skills: Algorithms, Data Structures, Problem-Solving Skills, Binary Tress, Link lists, Dictionaries, J Unit Testing, Networking Monitoring, SQL, Git, Microsoft Dynamics 365.
Data Visualization: Tableau, Power BI
Big data Tech: Hadoop, Spark
Language & Packages: Python, C++, Java, R, TKinter, TensorFlow, Ascon, Socket, Threading, Pandas, NumPy, SkLearn, Keras, Scikit-Learn, DJITelloPy API.
Project Management tools: Jira, Trello, Azure, ClickUp, GitHub
Personal Skills: Deep thinker learns new Technologies, work in groups, initiative taker, good Communication, Problem-Solving, Critical Thinking, Curiosity for new things, works independently, Time Manageable.

CERTIFICATIONS

AWS Certified Data Engineer – Associate
Expected – Feb 2025

AWS Certified Cloud Practitioner
VALIDATION NUMBER:
04d9e4e9947546b2b9d528a5f7a02a71

Data Cleaning in Python
VALIDATION URL:
ude.my/UC-ed08cfd5-249b-4f7a-861a-0092cf7b73d3

platforms, and conducted data analysis on cloud performance metrics to optimize infrastructure, resulting in a 10% reduction in downtime.
- Diagnosed and resolved technical issues: Improved system efficiency and end-user satisfaction within cloud environments, achieving a 95% customer satisfaction rating.
- Collaborated with cross-functional teams: Ensured seamless integration of data pipelines and cloud infrastructure services, facilitating efficient data flow and processing.
- Gained practical experience with cloud technologies: Assisted in deploying and maintaining cloud infrastructure services, including AWS and cloud orchestration tools.
- Configured and optimized cloud resources: Managed virtual machines, data storage solutions, and network components to support scalable data workflows.
- Researched and implemented data processing improvements: Explored emerging technologies to enhance data processing pipelines and infrastructure reliability.
- Managed and improved operational efficiency: Developed and managed ticketing systems for task prioritization, ensured visibility and resolution of daily operations, and facilitated daily Scrum meetings to align team efforts.

Junior Software Developer June 2021 – Dec 2021
SoftStack Developer

- Developed and maintained software applications: Utilized Python and adhered to coding standards and best practices, contributing to the successful delivery of 3 key software projects.
- Collaborated effectively with cross-functional teams: Gathered requirements, delivered high-quality solutions, and participated in code reviews to ensure code quality and maintainability.
- Proficient in data manipulation and analysis: Wrote and optimized SQL queries, resulting in a 20% improvement in data retrieval speed, and utilized Python libraries like Pandas, NumPy, and Scikit-learn for data processing and analysis.
- Gained experience in machine learning: Implemented small-scale machine learning models to support project needs, achieving an 85% accuracy rate.
- Continuously enhanced technical skills: Explored new libraries, tools, and industry trends to improve project outcomes and broaden data analysis capabilities.

ACADEMIC PROJECTS

AerialAce Drone Project Jan 2024
Software Engineering

- My role in this project was to manage the drone side programming, i.e., connecting the drone and programming the LED lights with Python.
- Programmed drones to perform predetermined shapes with LED lights, facilitating mesmerizing aerial displays.

PUBLICATIONS

Ijaz, A., Khan, A. A., Arslan, M., Tanzil, A., Javed, A., Khalid, M. A. U., & Khan, S. (2024). Innovative machine learning techniques for malware detection. Journal of Computing & Biomedical Informatics. https://jcbi.org/index.php/Main/article/view/508

Awan, I. A., Sumra, I. A., Mahmood, K., Mujahid, M. A., Khan, S., & Zaman, M. I. (2024, June 3). A reliable approach for data security framework in Cloud Computing Network. Migration Letters. https://migrationletters.com/index.php/ml/article/view/10835.

Iqbal M, Shafiq MU, Khan S, Obaidullah, Alahmari S, Ullah Z. 2024. Enhancing task execution: a dual-layer approach with multi-queue adaptive priority scheduling. PeerJ Computer Science 10:e2531 https://doi.org/10.7717/peerj-cs.2531

Iqra Ibraheem, Sadaqat Ali Ramay, Tahir Abbas, Rizwan ul Hassan, & Shouzab Khan. (2024). Identification of Skin Cancer Using Machine Learning. Journal of Computing & Biomedical Informatics, 7(02). Retrieved from https://jcbi.org/index.php/Main/article/view/627

EDUCATION

University of Alabama at Birmingham
Master of Computer Sciences
Major in Data Science

National University of Computer and Emerging Sciences
Bachelor of Computer Sciences

- I suggested which shapes we could draw in the Sky and what will be the movements of the drone.
- I also coordinated the project timeline and technical approach, so we delivered the project on time and within our budget constraints.

Socket Programming Jan 2023
Networking
- Designed and implemented a Socket Programming project for a networking class.
- Demonstrated proficiency in TCP/IP Communication, Client-Server architecture, and Remote Communication between a student and a robot using Python.
- I used the Socket Package for this Project.

Breaking The Captcha April 2023
Foundation Of Data Science
- Conducted an experiment for Breaking the Captcha and downloaded hundreds of images for training purposes.
- I trained hundreds of Captcha Images on my model.
- Collected around 1500 different images.
- For training purposes, I used Deep Convolutional Neural Networks.
- Each Letter in the images was treated as a single image for the Neural Network.
- Identifying a Single Letter was easier than the whole image.
- The accuracy for this was around 97 percent.

Water Pollution Detection Through Hyperspectral Images Dec 2021
Capstone Project
- Led a Capstone project focused on Water Pollution Detection Through Hyperspectral Images.
- Utilizing advanced Image Processing Techniques and Machine Learning Algorithms (Implemented with TensorFlow).
- Collected large datasets of satellite images for training purposes.
- Environmental Monitoring Principles to analyze and visualize pollution patterns (Implemented with matplotlib, Seaborn, and sci-kit-learn).
- The project involved Mapping or Spatial Analysis; mention any experience with GIS Tools or Software (Implemented with Geopandas, Folium).