Shahbaz Ali

0321-4856934 | shahbazlization@gmail.com | LinkedIn | GitHub

Education

Lahore University of Management Sciences, Lahore — Lahore, Pakistan
MS in Computer Science, CGPA 3.34 — *July 2019 - May 2021*

Courses Taken: Machine Learning, Design and Analysis of Algorithms, Deep Learning, Computer Vision, Advanced Operating System, Applied Probability, Digital Image Processing, Computer Architecture

Teaching Assistant: Machine Learning, Intro to Artificial Intelligence, Design and Analysis of Algorithms, Deep Learning, Hardware Architecture for Artificial Intelligence

Government College University, Lahore — Lahore, Pakistan
BS Computer Science, GPA 3.43 — *Aug. 2014 – May 2018*

Courses: Operating Systems, Data Structures, Analysis Of Algorithms, Artificial Intelligence, Machine Learning, Networking, Databases, Theory of Automata, Compilers Construction

Experience

Software Development Engineer — July 2018 - November 2019
Skills Knight Studios — *Lahore, Pakistan*

- Worked on different cross platform mobile games. Mostly added features or updates to the games already published on Play Store and App Store.
- Maintained a match 3 game with large user base. Removal of bugs reported by users and also quarterly major/minor feature updates

Projects

Deep Convolutional Generative Adversarial Network (DCGAN) | *Python, Keras* — April 2020

- Assignment of Deep Learning course implemented using Convolutional Layers
- Generated images of emojis (with good results) from Apple Emojis Dataset
- Designed both generator and discriminator networks

Recurrent Neural Network (RNN) | *Python, Keras* — May 2020

- Cleaning the dataset by removing stop words, punctuation, and html tags
- Positive/Negative classification of movie reviews from IMDB dataset

File System (Linux) | *C* — May 2020

- Basic file-system which has all basic functions like open(), close(), read(), write(), format(), unlink()
- Managed multiple users accessing the same files simultaneously

Memory Management (Linux) | *C* — April 2020

- Mimic the functionality of malloc() and free() in C without using any external API
- Added functionality like expand, coalesce and release for more efficient Memory Management

Web Server (Linux) | *C* — March 2020

- Primitive Multi-threaded Clients and Multi-threaded Server model
- Clients send a request(using socket programming), which is completed and acknowledged by Server

Addictive Gem Match Mania (Mobile Game) | *C#, Unity Engine* — Dec 2018 - Nov 2019

- Match 3 mobile game for Android and iOS
- Added core features to the game
- Also fixed user reported bugs in the game (with 100000+ users)

Clothing Classification (Neural Network) | *MATLAB* — June 2018

- Implemented & designed the architecture of Neural Network from scratch
- Implemented Backpropagation algorithm to learn to learn the best color combination of clothes
- Semester Project for Computer Vision Course

Handwritten Digit Classification (Neural Network) | *MATLAB* March 2018

- Implemented & designed the architecture of Neural Network from scratch to work on MNIST Dataset
- Implemented Backpropagation algorithm to learn to learn the best color combination of clothes
- Semester Project for Machine Learning Course

Among the Dead Ones! (Desktop Game) | *C#, Unity Engine* Feb 2018 - July 2018

- FPS Survival Shooter game for Desktop platform, worked as a part of my Final Year Project for Undergraduate
- Designed and programmed AI Zombies (NPC) for the game.
- Extensive work on Unity NavMesh System in collaboration with Unity's Macanim System to control the root motion of NPC Zombies
- Slide-free and accurate pathfinding for zombie character
- Ragdoll System to detect bullets with re-animation feature for Zombies & Audio Collection System with Scriptable Object

CrickSick Scoring Application (Android Application) | *Android Studio* May 2017

- Application for scoring/recording cricket matches
- Simple User Friendly interface to detect all the event of cricket match
- Semester project for Software Engineering Course

Technical Skills

A very good understanding of OPP concepts
Familiarity and understanding of relational databases like SQL
Good in logical and structural thinking
Languages: Python, C, C++, MATLAB, C#, Java
Frameworks: Keras, TensorFlow, PyTorch
Developer Tools: PyCharm, Spyder, Jupyter Notebook, Git, VS Code, Visual Studio, Unity, Android Studio
Libraries: pandas, NumPy, Matplotlib, OpenCV, Scrappy