RAJU KHADKA

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EDUCATION

Texas Tech University, Lubbock, Texas (CGPA 3.59/4.0)   **Graduation- May 2021**

- *Bachelor of Science in Computer Engineering*
- Minor in "*Computer Science*" and "*Mathematics*"

TECHNICAL SKILLS & TOOLS

- **Python (NumPy and Pandas), Java, C, C++, MATLAB, Dart, SQL, PHP, and HTML**
- **LabVIEW, Eagle Cad, LTSpice, AWS, MySQL, Firebase, Unity3D**
- **Flutter, Android Studio, Visual Studio, and Microsoft Office Suite**

COURSEWORKS

- **Machine Learning, Object Oriented Programming, Data Structure, Software Engineering, Project lab I and II**
- **Image Processing, Design and Analysis of Algorithm, Discrete Time Signal, CE Project lab, Senior Project Lab**

PROJECTS

Unity3D Game App, *Team Member*   AUG 2020-PRESENT

- Building a 2D RPG game based on 'Holland's Code' for TTU Advising Centre
- Game Integration with MySQL database to record the response from users
- Use of C# script for character movement
- Design environment based on Texas Tech University

Genre Prediction System, *Team Member*   JAN 2020- MAY 2020

- Utilize a Machine Learning (Neural Network) technology to predict the genre of the song
- Implemented concepts related to Machine Learning: algorithms, loss functions, and optimization techniques
- Developed an application with UI to control the functions of the system
- Interfaced Google Firebase database for data clustering and displaying necessary data to the UI
- Developed and implemented fully working android application for the system using Dart language

Maximum Power Point Tracking System, *Team Member*   AUG 2019- DEC 2019

- Coded microcontroller to sample and calculate the battery Charge Percentage, Power, and angle of solar panel
- Designed and integrated LabVIEW system with msp430f5529 microcontroller for monitoring electrical signals
- Created a Website using PHP and HTML and integrated with MySQL database
- Interfaced LabVIEW system, database, and website for providing information about sampled data

Autonomous Mail Delivery System, *Team Member*   JAN 2019-MAY 2019

- Built an "**Autonomous Mail Delivery System**" using BASYS 3 board and H-bridge circuit
- Designed and simulated amplifier circuit for IR Sensor using LM324 in LTSpice
- Designed and tested a printed circuit board (PCB) using Eagle Cad

EXPERIENCES

Feed-Forward Network and Backprop

- Implemented logistic regression algorithm for training model
- Generated neural network from scratch using feed-forward network and backpropagation

Weather Report App in Dart

- Develop a cross platform app to provide the location specific live weather condition
- Networked in flutter app with the HTTP package to fetch the data

INVOLVEMENT

- Institute of Electrical and Electronics Engineers (IEEE) ● Google Developers Club   ● NSA TTU

HONOR AND AWARD

- **Top 25 Presidential Scholarship (TTU)**
- "**President Scholarship**" during my high school for my outstanding leadership skills and excellent performance