Vagdevi Nandimandalam

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EDUCATION: Master's in Computer Science at University of Massachusetts Lowell

INTERNSHIPS

- Project based learning and development Internship on Python programming from Gyan Astra IT solutions.

Name of the project: Student Record Management System (24th April 2020– 24th June 2020) This project aims to maintain longitudinal information about students within a database, which in turn reduces paperwork and is much more accurate. Tools used: Anaconda prompt, Jupyter notebook.

- Project based learning and development Internship on Arduino-IDE from GCET.

Name of the project: Hand Gesture Controlled Wheel Chair (13th April 2020 – 11th May 2020) The wheelchair can be remotely controlled from several meters wirelessly without actually sitting on it. This can be controlled by hand gesture method with directions as needed which facilitates people in traveling to certain places who cannot walk/move freely due to any illness. Tools used: Arduino-IDE.

KEY PROJECTS

Minor project:-

Name of the project: Data integrity with cryptography, how reliable is your data over internet.

During digital communication, data was secured and protected using the RSA method. In order to prevent unauthorized individuals or a group of users from accessing sensitive data, cryptography is utilized. Encryption and decryption are the two primary functions of cryptography. Data encryption is the process of converting a message sent over a network into an unreadable encrypted message. The process of decrypting a communication at the receiving end restores it to its original format is known as decryption.

Major project:-

Name of the project: A Comparative study of different buffer layers for CZTS Solar cell using SCAPS-1D software.

Utilizing a solar cell capacitance simulator, a model for a CZTS-based solar cell was developed. For our examination, different buffer layers were used, and I chose CdS, ZnS, SnS2, InS, and Zn2SnO4 for my comparative performance analysis. The effects of various buffer layers on the solar cell's efficiency, fill factor, short circuit current density, and open circuit voltage are investigated. By altering the device and material characteristics within the experimentally possible limitations, it was possible to analyze and improve the performance of solar cells with various buffer layers.

EXTRA-CURRICULAR ACTIVITIES

- Certified in Verba maximux'20, BITS Pilani Hyderabad.
- Certified in college events like vaisheshika-19 by GCET and bhaswara-20 by GCET.
- AWS Fundamentals Certification from coursera.
- Participated in National webinar on "Introduction to Data Science and its Scope"
- Participated in "SATVARA-2.0 think quick" quiz competition organized by IEEE Circuits and systems Society Student Branch Chapter.
- Won prizes at singing competition at school level.

SCHOLASTIC ACHIEVEMENTS

- Our project- Smart blind stick using Arduino has gotten shortlisted for the J-HUB expo at **JNTU-H.**

SKILLS AND KNOWLEDGE

- **Programming Languages**: C, basics of Java, and Python.
- **Platforms**: Windows, Ubuntu.
- Arduino