Aldhapati Avinash

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Education

PES UNIVERSITY — Electronic City, Bangalore
B.TECH ECE, 7.76 CGPA — *2019 – Present*

CHETHANA PU COLLEGE — Yelahanka, Bangalore
State Board, 78% — *2017 – 2019*

RYAN INTERNATIONAL SCHOOL — Yelahanka, Bangalore
10th-ICSE, 89% — *2006 – 2017*

Projects

Image Steganography | *MATLAB*

- Implemented a simple steganographic algorithm on MATLAB
- The idea is to demonstrate how insignificant bits can hold important information in plain sight
- Also showed how trying to embed more information on a limited bit depth can nullify the steganographic effect
- Hid 'IF' poem by Robert Frost in a high quality bmp image of the GOT map

Error Analysis on Thermal Algorithm using custom datatypes | *Data Parallel C++, Intel oneAPI, Intel Devcloud*

- Implemented a Thermal algorithm on the Arria10 and Stratix10 FPGAs using high level programming
- Also analysed the effect of varying the datatype used, on the values generated and the amount of memory required to run the simulation
- Showed that depending upon the type of algorithm used and the permissible error, significant amount of memory can be saved and in turn, increase performance

Bluetooth Controlled Door Lock | *Arduino, Micro Servo Motor*

- Collaborated with peers from the Mechanical Department to implement a Bluetooth controlled door lock where a password is typed on a mobile app to lock/unlock door
- Used Bluetooth instead of using the IoT model to keep it simple and simultaneously keep it secure, as the network remains closed unlike the internet

Technical Skills

Programming Languages: Python, C/C++, MATLAB, DPC++
Tools and Platforms: Windows, Linux, Git, Spyder, MATLAB, Intel devcloud, Cadence, LTspice

Language Proficiency

- English - Native or bilingual proficiency
- Telugu - Native or bilingual proficiency
- Kannada - Professional working proficiency
- Tamil - Limited working proficiency
- Hindi - Limited working proficiency

Interests

- Physics
- Movies
- Chess
- Clay Modelling