PUSHPENDRA PARMAR

Computer Engineer

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PROJECTS

HUMAN POSE ESTIMATION

 Estimating 2d human pose with 16 landmarks detection on the body. Further squeezed the network from 110MB to 30MB with minute degrade in accuracy to speed up frame rate on live tracking.

AUTOMATISING CRYPTOCURRENCY PORTFOLIO

• Development of an algorithm to suggest optimal way to divide a certain amount in min-max game of Stability and Profit.

ENHANCED NEURAL ARITHMETIC LOGIC UNIT

 Modified Neural Arithmetic Logic Unit to learn more functions from multiplication and addition to generalize to calculate powers and exponent.

PATTERN RECOGNITION IN COMPUTER LANGUAGE

 Extracted patterns in computer languages such as C, Java and Assembly and make model sample the code intangible for humans at first glance, nevertheless unable to compile or execute. Extracted pattern includes knowledge to close a bracket when opened, not to use return statement when function declared void.

IMAGE RECONSTRUCTION FROM INCOMPLETE DATA

 Application of Graph Network, CNN and RNN to reconstruct image from incomplete input. Plausible accuracy was expected and achieved for grayscale images. Further extension similar model on speech synthesis from incomplete parts produces unreal output for human ears.

16 BIT PROCESSOR

 Designed a 16 Bit processor having basic functionalities of RISC V

TECHNICAL SKILLS

FORTRAN, C, C++, Python
CUDA, Java, Assembly, Octave
Linux
Deep Learning, Pattern Recognition
OpenCV, PyTorch, Tensorflow
Statistics, Probability
Arduino, Raspberry Pi

EDUCATION

Bachelor of Technology (Computer Engineering)

Nirma University

2021

Ahmedabad

CLASS XII

Saint Mary's

₩ 2017

Rajkot, Gujarat

• 84%

CLASS X

Atmiya School

2015

Rajkot, Gujarat

• 85%

FIELD OF STUDY

- Computer Vision
- Pattern Recognition
- Generative Model
- Quantum Computing
- · Reinforcement Learning

INTEREST

- Genetics
- Quantum Mechanics
- Astronomy
- Neuroscience
- Psychology
- Literature
- Mythology

HOBBY

- Reading
- Storytelling
- Chess
- Stargazing
- Ham Radio (Not yet licensed)