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OBJECTIVE

A self-motivated, hardworking graduate student in Computer Science looking for a challenging internship position in Software Development and Research.

EDUCATION

- ***University of Wisconsin-Madison*** ***Madison, WI***
  M.S. in Computer Science, ***GPA: 4.0/4.0*** ***Anticipated Dec 2019***
  Relevant Coursework:
  CS744 Big Data Systems, CS861 Theoretical Foundations of Machine Learning
  CS537 Introduction to Operating Systems, CS760 Machine Learning,
  CS761 Mathematical Foundations of Machine Learning (Audit),
  CS799 Master's Research (Automated Analysis of 3D Brain CT Images using Deep Learning)
- ***National Institute of Technology Karnataka, Surathkal*** ***Surathkal, India***
  B.Tech in Electronics and Communication Engineering, ***GPA: 9.11/10*** ***Graduated May 2016***
  Activities: TA for Engineering Mathematics II, Peer Mentor for MATLAB Programming.
  Relevant Coursework:
  Computer Programming, Analog and Digital Communication, Digital Signal Processing, Microprocessors, Data Structures and Algorithms, Application of Signal Processing to Image and Video, Advance Computer Architecture.

WORK EXPERIENCE

FIRMWARE ENGINEER AT SANDISK, A WESTERN DIGITAL BRAND ***JUL 2016 – AUG 2018***

- Designed, Developed and Validated following Firmware modules -Garbage Collection/Memory Compaction, Error Correction, Address Translation and Internal File System for USB Flash Drive products based on a platform (Karona Platform) which utilizes LDPC Error Correction Engine.
- Developed Algorithms to minimize number of instruction loads from disk to RAM
  Programming Languages Used – C, C++, Python

INTERN AT NATIONAL AEROSPACE LABORATORIES ***MAY – JUL 2015***

Projects worked on:

Active Noise Control

- Implemented FxLMS Algorithm on a microcontroller (based on TI TMS320C6748) unit which controlled noise control headphones.

Digital Video Watermarking for metadata embedding

- Developed and implemented an algorithm for embedding metadata directly in compressed MPEG-4 Video bit-stream (MATLAB).

SKILLS

- Programming Languages: C/C++, Python, MATLAB
- Tools / Platform: Pytorch, GIT, Accurev, Tensorflow
- Other Skills: Machine Learning, Computer Vision

PROJECTS

Automated Analysis of 3D CT Images of Brain using Deep Learning ***SEPT 2018 - PRESENT***

- Developed and Implemented Deep Learning Models for detecting several Brain Abnormalities such as Hemorrhage, Lesion and Stroke using 3D CT Images of Brain.
- Currently focused on developing Models that could automatically generate Patient Reports (Natural Language Report, describing the abnormalities and other conditions) from CT Images.

Word Embeddings for Fine Grained Sentiment Analysis ***NOV – DEC 2018***

- Current methods to learn word embeddings result in similar representation for words with different connotations and hence, sentiment recognition systems relying on them perform poorly. To overcome this, I proposed a new approach to learn word representation, which improves the performance of sentiment recognition systems that rely on word vector representations.

Reconfigurable Architecture for face Detection ***AUG 15 – APR 16***

- Developed a custom Face Detection Model suitable for Hardware Implementation using Viola-Jones Face Detection Framework. This model was trained and validated on MATLAB.
- Designed and Developed Hardware accelerator for Face Detection using Xilinx Zedboard.
- Languages and Tools Used - Xilinx Vivado Design Suite, C++, VHDL, and OpenCV.

Algebraic Reconstruction using SART and Total Variation De-noising ***MAR 2015***

- Developed and implemented an improved version of SART Algorithm (simultaneous algebraic reconstruction technique, a computerized tomography Algorithm) that uses Total Variation De-noising to reduce the noise levels in the Images reconstructed from limited CT projection data.
- Tools used – MATLAB