Kushal P

Course: M Sc Mathematics, B E Computer Science

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CGPA: 7.94

Date of Birth: 18 - 02 - 1997

ACADEMIC DETAILS					
COURSE	SPECIALIZATION	INSTITUTE/COLLEGE	BOARD	%CGPA	YEAR
XII	Science	Venkat International Public School,	CBSE	95.6	2014
		Bengaluru			
Х	General	St Ann's High School	ICSE	92.3	2012

ELECTIVES/TECHNICAL PROFICIENCY

Courses Completed (as part of Academics)

Computer Programming, Number Theory, Object Oriented Programming, Optimization, Operations Research, Cosmology, Database Management System, Software Development for Portable Devices, Digital Design, Microprocessors and Interfacing, Computer Architecture, Elementary Real Analysis, Measure and Integration, Mathematical Methods, Numerical Analysis, Engineering Graphics, Discrete Mathematics, Logic in Computer Science, Principles of Programming Language, Discrete Structures and algorithms, Theory of Computation, Operating Systems, General Biology, General Chemistry, Cultural Studies, Development Economics, Neural Networks, Complex Analysis.

Technical Proficiency

C++, Python, Java, Matlab. Frameworks: Android Studio, Unreal Engine, Xilinx(Verilog), Proteus.

Hardwares: Raspberry Pi, MicaZ, Beaglebone Black, Arduino.

WORK EXPERIENCE/PROJECTS

Instructor of CTE course - Introduction to game development using Unreal Engine Dr Bharath M Deshpande jan 2016 - April 2016 BITS Pilani, Goa Campus

 Worked as an instructor of Introduction to Game Development which involved us teaching the registered students and developing smalls games on Unreal Engine.

Online Elicitation and Textualization of Tacit Knowledge

May 2016 - July 2016

Mentor - Mr Jehadeesan

IGCAR, Kalpakkam

- Building a standalone system to convert speech to text.
- Using CMUSphinx trained model to improve the accuracy.
- Using Julius Engine to Train and Recognise Speech
- Basics of Natural Language Processing.

Post Processing of OCR output

July 2016 - July 2016

Mentor - Mr Jehadeesan IGCAR, Kalpakkam

- improving the output of OCR by implementing suitable algorithms.

- Used python to extract each word from the OCR and searching it over a dictionary of over two lakh words.
- Used C++ to check the possibilities of unread space by OCR.

Image processing and its applications in wavelets using matlab

August 2016 - November 2016

Mentor - Dr Amit Setia

BITS Pilani, Goa Campus

- implementing laplacian and gauss transformation on image.
- implementing haar transform on an image.
- Experimenting with various Image Filters, compress them using suitable techniques.

Automatic Washing Machine

Mentor - Dr Anupama K R

March 2017 - April 2017

BITS Pilani, Goa Campus

- Simulated an automatic washing machine using Intel 8086 in Proteus as part of Microprocessors and Interfacing course.

Image De-Raining using Deconvolutional Networks

Mentor - Mr Tirthraj Dash

September 2017 - November 2017

BITS Pilani, Goa Campus

- removing rain from the given images using convolutional and deconvolutional neural networks.

Instructor of CTE course - Deep Learning using Tensorflow

August 2017 - Present

Mentor - Dr Bharath M Deshpande

BITS Pilani, Goa Campus

- Working as an Instructor for Deep Learning course.

Android Application to Detect diseases in Crops

August 2017 - Present

Mentor - Mr Sreejith V

BITS Pilani, Goa Campus

- Training a model on leaf dataset of different crops using Convolutional Neural Networks(tensorflow).
- The image captured using the application is encoded and sent to a server (Python Flask) which runs through the trained model and sends back the predicted output to the application.
- Android Application will detect if the leaf of the crop is diseased, suggest a suitable cure.

Recommender model for what document should be read next

January 2018 - Present

Mentor - Dr Swati Agarwal

Blts Pilani, Goa Campus

- Building a recommender to recommend documents.

POSITION OF RESPONSIBILITY

1.Core Member - Shiksha (Nirmaan Club).

September 2014 - Present

Description: Active member of Nirmaan NGO (part of Shiksha vertical) where we teach slum (zari) children for JNV Exams (scholarship exam which offers free education till 12th)

2.Organizing member of HULT Prize at BITS Pilani Goa.

October 2016 - October 2016

Description: Successfully organized the event which involving students of BITS Goa and Hyderabad campus competing to reach the International event.

Extracurricular Activities

- Playing Badminton , Football, Tennis. Reading Novels, watching movies.