Ashish Manmode

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EDUCATION

IIT KHARAGPUR
Dual Degree (M.tech+B.Tech)
M.Tech in Visual Information Processing and Embedded Systems
B.Tech in Electronics
Expected Apr 2017 | Kharagpur, India
Cum. GPA: 8.30/10

NAVODAYA VIDYALAYA
Higher Secondary
Apr 2011 | Wardha, India
Score: 94.4%

LINKS

Github:// **ashmanmode**
LinkedIn:// **ashmanmode**
Web:// **ashmanmode.github.io**

COURSEWORK

GRADUATE
Parallel & Distributed Algorithms
(Practicum Included)
Advanced Graph Theory
Digital Image Processing
(Practicum Included)
Pattern Recognition & Image Understanding

UNDERGRADUATE
Algorithms I and II
Speech & Natural Language Processing
Data Structure & Object Representation
Machine Intelligence & Expert Systems
(Practicum Included)
Probability & Stochastic Processes
Matrix Algebra

SKILLS

PROGRAMMING
Over 5000 lines:
C • C++ • Python
Over 1000 lines:
PHP • JavaScript • Matlab
Java • Python • Scala • LaTeX
Familiar:
MySQL • Google BigQuery
OpenCV • Unity

EXPERIENCE

IBM INDIA | Extreme Blue Intern
May 2016 – Jul 2016 | Banglore, India
- Built a client Server Model on Apache Spark which enables handling large sized chip designs on distributed computing platform, making it scalable horizontally
- Graph Processing functionalities like path between nodes using Google Pregel

TRINITY COLLEGE DUBLIN | Visiting Research Student
Nov 2015 – Dec 2015 | Dublin, Ireland
- Constructed a virtual 3D model of the college with Depth Based Rendering
- Occlusion detection for real objects using Google Tango Project

GRAY ROUTES INNOVATIVE DISTRIBUTIONS | Software Intern
May 2015 – Jul 2015 | Mumbai, India
- Implemented functionalities using google maps API and the direction service
- Google BigQuery was used for big data parallel query processing

PROJECTS

DEEP NEURAL NETWORK BASED SPEECH SYNTHESIS
Jul 2015 – Present | IIT Kharagpur
Developed a TTS Engine by mapping linguistic input features to acoustic output features on DNN. It gave better performance than conventional HMM TTS System

PLAGIARISM DETECTION USING NLP TREE KERNEL
Jul 2015 – Nov 2015 | IIT Kharagpur
Trained SVM using subtree matching techniques on abstract syntax tree & KL Divergence in the language model generated using in-lined codes, gave 78% accuracy

FACE RECOGNITION USING 2D-PCA
Jul 2015 – Nov 2015 | IIT Kharagpur
Analyzed 2D-PCA based feature extraction which gave 95.6% accuracy on face recognition and compared the computational efficiency of 2D-PCA over PCA

IMPOSTER DETECTION USING KEY STROKE DYNAMICS
Jul 2015 – Nov 2015 | IIT Kharagpur
Determined the multivariate Gaussian distribution by using the hold times and the latency periods of the keystrokes. Achieved accuracy of 75% in user detection

CONSTRUCTION OF 3D MODELS FROM PANORAMIC MOSAICS
May 2015 – Jul 2014 | IIT Kharagpur
Designed a interactive tool for 3D reconstruction from panoramic mosaics. The problem was solved as a least square problem for hard and soft constraints

AWARDS

2015	Rank 108th	ACM-ICPC Asia, Chennai
2011	Best Exhibit	98th Indian Science Congress, Chennai
2011	1st	Jawaharlal Nehru National Science Exhibition, Jaipur
2011	1st	CBSE XII Board, Pune Region
2010	Top 400	Indian National Mathematics Olympiad
2008	Top 10	XL National Mathematics Talent Competition

EXTRA CURRICULAR

2015	Gold	Inter-Hall Sketching Competition
2013	Subhead	National Students Space Challenge'13