

Ashish Manmode

ash.manmode@gmail.com | 7585 965862

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:// [ashishmanmode.com](#)

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 | Bangalore, 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 an 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 |