

EDUCATION

2012-16	B. Tech, COMPUTER SCIENCE AND ENGINEERING	Indian Institute of Technology, Kanpur	8.8/10.0
2012	12 th MAHARASHTRA Board (HSC)	Abasaheb Garware College, Pune	91%
2010	10 th MAHARASHTRA Board (SSC)	R. R. Highschool, Jalgaon	96%

INTERNSHIPS

Rocketbox

MAY 2015 - JUL 2015

SUMMER INTERN, Mumbai

- Developed an android app Rocketbox drivers with integrated tracking module for real time location of drivers.
- Local language support were integrated along with notification alarms.
- Provides customer details along with generating bills at the end of the ride.

Housing.com

MAY 2014 - JUL 2014

SUMMER INTERN, Mumbai

- Enhanced Housing's android app, improving response times and navigation.
- Implemented K mean clustering algorithm to effectively display large data on the map.
- Coded a new tab to displays new projects & construction sites from an aerial view

AWARDS AND ACHIEVEMENTS

- **Rank 1**, Regional Maths Olympiad (Maharashtra-Goa) 2011
- **National Top 400**, Qualified for the Indian National Physics Olympiad (INPhO) 2011
- **Kishore Vaigyanik Protsahan Yojana (KVPY) Fellow**, Indian Institute of Science (Govt. of India) 2012
- **AIR 24 (2012) & AIR 72 (2011)**, National Science Talent Search Examination (Unified Council) 2012, 11
- **Two Time Global Top 35**, Intl. Maths Olympiad (SFO) & World Rank 5, Abacus Intl. Maths Challenge (GCS) 2009, 08
- **Top 0.25%**, IIT JEE (50000 Candidates) & **Top 0.1%**, AIEEE (1200000 Candidates) 2012
- **NTSE Scholar**, Awarded to the **Top 700** Students by NCERT (Govt. of India) 2008
- **State Rank 1**, Maharashtra State Talent Search Examination (MTSE) 2010
- **Merit Certificate Awardee**, Homi Bhabha Bal Vaidyanik Competition 2008

PROJECTS

Automated Video surveillance

JAN 2015 - APR 2015

UNDERGRADUATE PROJECT, Prof. Harish Karnick

- Devised ad hoc variations of frame differencing algorithm for real-time foreground/background classification of frames.
- Analyzed different machine learning techniques such as SVM, LDA, QDA and Frame Differencing techniques for their accuracy in foreground/background classification.
- Implemented an adaptive background model Codebook for foreground extraction from live feed by background subtraction
- Achieved 94% accuracy in classification of foreground and background frames.

Compiler for Perl

JAN 2015 - APR 2015

COMPILERS, Prof. Subhajit Roy

- Implemented an end to end compiler for Perl in python which generates code for x-86 architecture.
- Compiler supported basic data types Integers and Strings along with operators, statements, loops and functions including recursive functions.

Predicting Sentiments in Movie Reviews

JAN 2015 - APR 2015

MACHINE LEARNING, Prof. Harish Karnick

- Amongst the **top 50** submissions on kaggle.
- Project was based on Kaggle problem of classifying movie reviews on the basis of sentiment analysis as positive or negative.
- Used feature extraction methods such as TF-IDF, bag of words, bag of centroids along with classifiers SVM, LDA, QDA, Random forest.

- Extended the standard system call library of NachOS and implemented system calls pertaining to Fork, Exec, Join, Yield, Sleep and Exit.
- Implemented process scheduling algorithms: UNIX Scheduling, First in First Out, Round Robin, Shortest Job First and Non-pre-emptive job scheduling to assess their relative performances.
- Programmed page replacement algorithms: Random Page Allocation, First in First Out, Least Recently Used(LRU) and LRU Clock to evaluate relative performances under difference scenarios.

Online Course Managment System

AUG 2014 - NOV 2014

- Implemented online portal for course management system where different access where provided to student and teachers.
- Developed various sections such as announcements regarding course, section to upload course material.
- Student can upload their solutions to assignment using this online portal, statistics were generated on the basis of performance.

Hockey de Air game

MAY 2013 - JUL 2013

- Selected by DORA and awarded funding for future work.
- Built motion controlled robots capable of playing game like air hockey using Image Processing.

TECHNICAL SKILLS

Programming Languages	C, C++, Python
Tools	Android Studio, Latex, Git, Octave, Weka
Platforms	Windows, Linux, Android

COURSES

Machine Learning	Data Mining	Operating Systems	Compilers
Principles of Programming Languages	Computer Organization	Game Theory	Introduction to Logic
Data Structures & Algorithms	Database Systems	Networks	Probabilty & Statistics

EXTRA-CURRICULAR ACTIVITIES

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- **Polaroid (Techfest IITB):** Represented IITK; Used Path Planning Algorithms & Image Processing to fabricate robots
 - **IARC (Techkriti IITK):** Represented IITK; Implemented PID algorithms for robot navigation using Infrared Sensors
 - **Takneek: Rank 1, Wild Soccer; Rank 2, Line Following Robotics Event (Intra-College)**
 - Won Science Quiz organized by University Department of Chemical Technology on National Science Day.