



# ADITYA GANESH NARAYAN

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github/narayanaditya95

## EDUCATION

Year	Degree/Exam	Institute	CGPA/Marks
2013-18	M.TECH Electronics and Elec. Communication	IIT Kharagpur	8.04 / 10
2011-13	Maharashtra State Board HSC	Thakur Vidya Mandir Junior College	88.17%
2011	ICSE	Ryan International School Goregaon	92%

## COURSEWORK INFORMATION

Data Structures and Algorithms | Object Oriented System Design | Cryptography | Data Analytics | Digital Image Processing | Internet Architectures and Protocols | Machine Intelligence and Expert Systems | Pattern Recognition & Image Understanding | Computer Communication and Networking

## INTERNSHIPS

### AMAZON INDIA **Account Auditing for 3P sellers** **May-July 2017**

- Designed and implemented an account auditing infrastructure for third-party sellers on Amazon's Seller Central platform
- Implemented a daemon to periodically create and deprecate DynamoDB tables for time-series data to ensure optimal performance
- Offered a Pre-Placement job offer for impressive performance

### AMAZON INDIA **Bulk SMS campaigns for MoA accounts** **May-July 2016**

- Created an interface for the business teams to schedule bulk SMS marketing campaigns
- Implemented a multi-threaded program to simultaneously dispatch requests to other internal services
- Deployed the interface using AWS services to invoke the program at regular intervals

### AASAANJOBS **End-to-end testing framework** **June-July 2015**

- Designed and implemented a complete end-to-end testing framework on Selenium for aasaanjobs.com
- The framework was deployed to the organization's stack to reduce testing time by a factor of 10

## PROJECTS

### PORTING AMY FOR PYDATA **May-July 2016**

- Implemented a RESTful API over PyData conference websites with endpoints for talks, participants and sponsors
- Designed and implemented an import wizard within web project AMY that fetched participants, talks and sponsors from the REST API
- Added a pluggable Django app to AMY that extends the sponsorship and import functionality adhering to PyData's requirements

### DYNAMIC BANDWIDTH ALLOCATION IN EPONs **2016-17**

- Simulated a 16 ONU TDM EPON network in OMNET++ with varying credit schemes under self-similar Pareto-distributed traffic
- Achieved a maximum link utilization of over 98% with IPACT algorithm under varying credit schemes

### MULTISCALE EDGE-BASED TEXT DETECTION FROM COMPLEX IMAGES **April 2017**

- Detected text regions out of complex images using the edge densities, strength and variance of orientations
- Utilized Tesseract, the standard text processor, to extract characters from the probability density map.

### IMPOSTOR DETECTION USING KEYSTROKE DYNAMICS **Nov 2016**

- Designed and developed a live impostor detector that detects an impostor based on the keyboard dynamics of the user input
- Trained Naive Bayes classifier on keyboard latency data from a group of 8 people over a period of 3 months to achieve 88% accuracy

### ANOMALY DETECTION IN REAL-TIME SURVEILLANCE VIDEOS **April 2017**

- Achieved real-time object detection and classification using a multi-layered CNN trained on nVidia GTX GPUs
- Determined anomalies in pedestrian and traffic by detecting sparsity in optical flow

## AWARDS AND ACHIEVEMENTS

- Secured Maharashtra state top 1 percentile in National Standard Examination in Physics, 2012-13
- Secured national top 1 percentile in National Standard Examination in Chemistry 2012-13
- Secured an All India rank of 28 in Unified Cyber Olympiad, 2008

## POSITIONS OF RESPONSIBILITY

### TECHNOLOGY ROBOTIX SOCIETY **GOVERNOR** **2016-17**

- Led a team of 30 robotics enthusiasts in conceptualizing Robotix 2015, India's biggest college robotics fest with over 2,000 yearly footfalls
- Conceptualized and designed the online coding event Sudocode. Implemented an online code judge that accepted over 100 submissions

### SOFTWARE CARPENTRY **PROJECT MAINTAINER** **May 2016 - Present**

- Co-responsible for maintaining and upgrading the project AMY - web application used by this world-wide training organization to manage all their 1,000 workshops and 25,000 learners
- Contributed over 80,000 lines of codes across 120+ commits over the past year

## SKILLS AND EXPERTISE

**Programming Languages:** Python, Java, C++, JavaScript, SQL, Ruby, ASM, Matlab  
**Software Frameworks** : Django, Spring, NodeJS, Omnet++, Git, Robot Operating System, Selenium