



Udayraj Deshmukh

B.Tech undergraduate
222, Kapili Hostel,
Indian Institute of Technology Guwahati

+91-8723885619
deshmukh@iitg.ac.in
udayrajdeshmukh7@gmail.com
<http://udayraj123.github.io>
Last updated: March 2018

EDUCATION

Year	Degree/Certificate	Institute/Board	CGPA/Percentage
2015 - 2019	B.Tech	Indian Institute of Technology, Guwahati	8.42 (Current)
2015	Senior secondary	CBSE board	94.3%
2013	Secondary	Maharashtra State Board	89.4%

PROJECTS

- 1. Technothlon Online event : Fluxo-de-Energia** Sep 2016
A Visually attractive web-based game inspired from Virtual Stock Market <https://goo.gl/NJjrNF>
for school students. It enables students to experience how stock market functions in a fun way.
Technologies used: Laravel (PHP), MySQL
- 2. Android App for Technothlon** <https://goo.gl/esa5iC>
Contributed to the backend development for the app based on cordova engine.
Technologies used: Apache Cordova, jQuery, Ajax, Assemble.
- 3. OMR Checker** Summer 2017
Self-made project
Created a full-fledged OMR checking software that can <https://goo.gl/rjnmqu>
 1. Read OMR sheets scanned at any angle and having any color
 2. Evaluate them by a customizable marking scheme with section-wise marking, bonus questions, etc.Technologies used: openCV (python)
- 4. Rubik's Cube Solver Robot** Mar 2017
Robotics Club, IIT Guwahati.
Using Image processing, Arduino, simple Acrylic parts and Servo motors <https://goo.gl/tpCTF2>
to make a robot that solves the Rubik's cube.
Technologies used: openCV (python), Arduino

EXPERIENCES

- 1. Application of RNN in protein genomics** Summer 2017
Prof. Rajat Kumar De, Head, MIU, ISI Kolkata.
 1. Implemented basic ML models from scratch - Linear & Logistic regression and Multi Layer Perceptrons
 2. Made an LSTM model for Protein Family Classification on the uniprot database.
 3. Made a deep learning model for Protein Secondary Structure classificationKey libraries: tensorflow, pandas, numpy
- 2. Online Head, Technothlon 2017** Sep 2016 - Sep 2017
<http://technothlon.techniche.org>
Created a complete web based solution that provides various services for different user accounts :
For students: Online quizzes, admit-card generation, registration payment portal
For organizers: An interface to upload student list, manage accounts, school details & centers.
For admins: View & manage any registrations and all the above tasks.
Key technologies: Laravel(PHP), jQuery, MySQL.

TECHNICAL SKILLS

- **Programming languages** : C, C++, Python, VHDL
 - **Web technologies** : Laravel (PHP), HTML, Bootstrap/CSS, Javascript, JQuery, MySQL
 - **Miscellaneous** : Git, Bash, Octave*, LaTeX*, LMMS (Music Studio), Android programming *
- * Elementary proficiency

POSITIONS OF RESPONSIBILITY

- **City representative, Sangamner(Maharashtra), Technothon 2016**
Conducted the exam single handedly in my city with a participation of over 200 students.
- **Core Team Member, Technothon 2016**
Prepared logic-based questions for Technothon and planned events for its second level i.e. Mains that takes place at IIT Guwahati.
- **Chief Organizer, Technothon 2017**
Leading a team of about 300 organizers for the successful conduction and publicity of Technothon, the international school championship in more than 350 cities across the nation.
- **Hostel Coordinator, Saathi Counseling Service, IIT Guwahati, 2017**
Conducted mentor-mentee interaction sessions to bridge the communication gap between freshers and seniors in the college.
- **Mentor, Saathi Counseling Service, 2018**
Guided fellow juniors for their academic development and mental well being.

ACHIEVEMENTS

- **JEE Advanced 2015** : Secured **AIR 800** among 0.15 million candidates appearing for the Exam.
- Was among the top 10 of all students (650+) at IIT Guwahati in the freshman year.
- Obtained **AS Grade** in the course "Introduction to Design DD210M" in 2016.
- **CodeChef SnackDown 2017**: Secured rank 615 among 21,038 teams from 116 countries in the Pre-Elimination round.
- **ACM ICPC 2018**: Qualified for Regionals at Amritapuri Site and secured a rank of **102** in the onsite competition.

KEY COURSES TAKEN

- | | |
|-------------------------------------|-------------------------------|
| • Data Structures Lab & Theory | • Algorithms |
| • Discrete Mathematics | • Optimization* |
| • Linear Algebra | • Networks Lab & Theory* |
| • Software Engineering Lab & Theory | • Databases Lab & Theory* |
| • Operating System Lab & Theory | • Compilers Lab & Theory* |
| | * to be completed in May 2018 |

EXTRACURRICULARS

- Participated in the event - '**Dashboard**' in **5th Inter-IIT tech meet** held at IIT Kanpur in March, 2017
- **Kriti 2016** : Participated in the event of '**Pitch It**', a startup ideation competition in the Inter-Hostel Technical Competition.
- **Manthan 2017** : Bagged **2nd position** in Inter-Hostel Charcoal Painting competition.
- **Manthan 2016** : Participated in '**Footloose**', the Inter-Hostel Dance Competition
- **Hobbies**: Stunts, Electronic Music, Photography, Table Tennis, Sketching, Charcoal Painting