



Achin Parashar
Civil Engineering
Indian Institute of Technology Bombay

170040076
UG Third Year (B.Tech.)
Male
DOB: 26/07/1998

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2020	8.18
Intermediate/+2	CBSE	Campion School, Bhopal	2016	91.60
Matriculation	CBSE	Campion School, Bhopal	2014	87.40

- Pursuing **Minor** in Department of **Computer Science and Engineering (CSE)**, IIT Bombay

[2017-Present]

SCHOLASTIC ACHIEVEMENTS

- Exceled in JEE Advanced Examination with **99.02** percentile among **0.2 million students** [2017]
- Achieved **All India Rank 587** among 1.4 million students in JEE Main Examination [2017]
- Secured **State Rank 1** and **International Rank 19** in International Mathematics Olympiad (IMO) [2014]
- Awarded **AA** grade (top 12.5%) in Computer Programming and Utilization [2018]
- Recipient of IBM Docker Essential badge for creating Docker container using **IBM** Container Service [2019]

KEY ACADEMIC AND TECHNICAL PROJECTS

- Handwritten Mathematical Expression Solver** | *Introduction to Machine Learning Guide - Prof. Sunita Sarawagi, IIT Bombay* [Oct 2018 - Nov 2018] *Course Project*
- Successfully designed and implemented regression tree classifier from scratch based on variance reduction technique and stood **2nd** in one of the two closed competitions which were held on the **Kaggle**
 - Developed a solver that recognizes handwritten math expression from image and subsequently evaluate it
 - Used CNN approach for recognizing the digits and symbols, by making a **3** layered neural network for accurate prediction
 - Implemented image-processing techniques, using **OpenCV** python library for segmentation of digits and symbols

- Chain Reaction** | *Computer Programming and Utilization Guide - Prof. Krishna S, IIT Bombay* [Jan 2018 - May 2018] *Course Project*
- Redesigned the android game "Chain Reaction", aim being to stack lobes to eliminate opponents
 - Devised and introduced a technique so that the game can be played against a human counterpart
 - Integrated and solved the problem using file handling, classes, structures and inheritance in C++

- Alumni Student Mentorship Program** | *Research Project Platform to foster meaningful mentoring relationships between alumni and current students* [Apr 2019 - Present] *Self-Project*
- Developing an algorithm to allocate **300+** alumni mentors to students under the ASMP program, taking into account the preferences of all involved stakeholders, reducing allotment time by **75%**
 - Designed and implemented the personalized cart logic similar to online retail stores to select a mentor based on one's personal preferences in Django framework

- Analysis of Water Supply System** | *Applied Hydraulic Engineering Guide - Prof. Riddhi Singh, IIT Bombay* [Apr 2019 - May 2019] *Course Project*
- Designed the algorithm to identify major and minor energy losses upto **93%** accuracy in pipe flow using **C++**
 - Analyzed and evaluated the Hydraulic gradient line for **10+** systems and plotted them using Matplotlib library in Python

- Alumination Website** | *Student Alumni Relation Cell (SARC), IIT Bombay* [Apr 2018 - Oct 2018] *Self-Project*
- Flagship event of the organization*
- Revamped the official website of Alumination and developed interactive illustrations using Javascript and CSS
 - Incorporated Bootstrap 4 front-end framework to make the website responsive in both PC's and mobiles alike

- Bluetooth Controlled Racing Bot (XLR8)** | *Institute Technical Council (ITC), IIT Bombay* [Oct 2017] *Competition*
- Technical tournament of the institute*
- Was a member of a 4-man team that built a manually controlled bot capable of negotiating different kinds of obstacles in its path(including 30 degree gradient elevation) in stipulated amount of time
 - Gained experience in wireless controlling learnt circuit designing on PCBs to add many active elements

- RC Plane** | *Institute Technical Council (ITC), IIT Bombay* [Jan 2018 - Apr 2018] *Competition*
- Technical tournament of the institute*
- Designed and Fabricated a remote controlled plane as a part of competition conducted by Aeromodelling club, IITB
 - Investigated optimum design parameters which enhanced flight stability and performance using coroplast with partially symmetric, dihedral aerofoils

PROFESSIONAL EXPERIENCE

Cogo Freight Pvt. Ltd. Software Developer <i>Platform to provide tech driven solutions for international shipments market</i>	[Jun 2019 - Jul 2019]
<ul style="list-style-type: none">Created 7+ APIs using Ruby on Rails framework to facilitate email tracking by fetching information like total link clicks, impressions, user browsers/devices and subsequently used the data for individualized, targeted information flowDeveloped Frequently Asked Questions(FAQ) buckets with personalized features and visibility for each userBuilt an optimized program for selective database fetching over Postgres, MongoDB for customized report generationImplemented the front-end user interface for back-end views using ReactJS library for single page applications	
BodhiTree / Evalpro <i>Online learning portal</i> <i>Guide - Prof. Varsha Apte, Computer Science & Engineering, IIT Bombay</i>	[Dec 2018 - Jun 2019] Research Project

POSITION OF RESPONSIBILITY

Core Team Member <i>Student Alumni Relations Cell</i>	[Apr 2019 - Present]
<i>Leading the web team of the 55+ membered two-tier body which works closely with Dean ACR</i>	
<ul style="list-style-type: none">Responsible for maintaining and updating 7+ domains of SARC using Nginx reverse proxy over gunicorn webserversIdeated and Revamped SARCasm web portal, one-of-its-kind online IIT-B crypt hunt to cater 3500+ studentsIncorporated Django's MVT architecture and implemented UI/UX design using JavaScript for user friendly experienceGuided 120+ volunteers for effective communication; successfully contacted 10,000+ alumni in 10 daysCapitalised a quarter-over-quarter growth increment of 300% in social media reach on FacebookIdeating the structure of Institute Yearbook 2020 and its website to provide nostalgic look back to 1.5k+ fresh graduates	
Academic Mentor <i>Department Academic Mentorship Program (DAMP)</i>	[Apr 2019 - Present]
<i>Selected from 65+ applicants on the basis of balanced academics, extracurricular activities & peer reviews</i>	
<ul style="list-style-type: none">Mentoring 6 sophomores in academics, time management and involved in general upliftment of the departmentWorking closely with DAMP team to organize sessions on Honors/Minors & to enhance student professor interaction	
Competitions Coordinator <i>Mood Indigo</i>	[Aug 2018 - Jan 2019]
<i>Led a team of 10+ Organizers in the Asia's largest college Cultural Festival; 141,000+ footfall with 220+ events</i>	
<ul style="list-style-type: none">Responsible for successfully conducting 2 competitions in Journalism and Communication genre, and functioned as a first point of contact for the cultural heads of 50+ participating colleges across the countryCapitalized a year-over-year ascension of 111% increase in participants and 120% judges in the competitionsInvited celebrities for showcasing of events at NCPA and Prithvi Theatre under Live Your Passion(LYP)	

TECHNICAL SKILLS & INTERESTS

Programming	C, C++, Java-Script, Python, MATLAB, R, Ruby, ReactJS, NodeJS, Git-Hub
Development tools	HTML, CSS, Bootstrap, Android Studio, Octave, AutoCAD, SolidWorks, Arduino
Database Management Systems	MongoDB, Postgres, redis, sidekiq
Frameworks	Django, Rails

RELEVANT COURSES

Computer Science	Computer Programming and Utilization, Machine learning, Data Structures and Algorithm Cryptography and Number theory
Mathematics Core Courses	Calculus, Linear Algebra, Differential Equations, Partial Differential Equations, Structural Mechanics I,II*; Structural Design(RCC)*; Structural Design*; Solid Mechanics Solid Mechanics; Geotechnical Engineering I*; Applied Hydraulic Engineering; Building Materials and Construction; Geodesy; Transportation Engineering I*;
Miscellaneous	Quantum Physics, Electrodynamics, Engineering Drawing, Electrical Circuits, Biology, Chemistry

EXTRA CURRICULAR ACTIVITIES

<ul style="list-style-type: none">Part of the semifinalist cricket team for Inter-Hostel Cricket General Championship among 16+ teamsCompleted and excelled in an year long course in Cricket conducted by National Sports Organization (NSO)Successfully completed certified Consulting Workshop conducted by Academic Council, IIT BombaySuccessfully completed the Android app development Bootcamp organized under Technical Summer SchoolVolunteered for Robin Hood Army(RHA) distribution of food from community to serve less fortunate peopleParticipated in the World's largest beach Clean-up Campaign at Versova Beach launched by Afroz ShahInvolved in Social campaign of Mood Indigo, "See through my eyes", on spreading awareness about eye donation	[2018]
	[2017]
	[2018]
	[2018]
	[2019]
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