

## YASH BHATNAGAR



### **ACADEMIC DETAILS**

Year	Degree / Board	Institute	GPA / Marks(%)
	B.Tech in Biochemical Engineering & Biotechnology	Indian Institute of Technology, Delhi	7.164
2016	CBSE class XII	Ryan International School	90%
2014	CBSE class X	Ryan International School	10/10

### SCHOLASTIC ACHIEVEMENTS

- Secured All India Rank 3504 in JEE Advanced'17 and 2525 in JEE Mains'17 amongst 1.4 million candidates (2017)
- Merit Cum Means: Recipient of MCM Scholarship for 6 consecutive semesters from during stay at IIT (2017,2020)
- Deep Learning Specialization, deeplearning.ai: Certified for completion of 5 Coursera courses in Python (2020)
- Topics: CNNs, RNNs, LSTM, Adam, Dropout, BatchNorm, Xavier/He initialization; profile- github.com/yashbhtngr
- School level topper National Science Olympiad conducted by Science Olympiad Foundation amongst 80+ students (2015)

### **INTERNSHIPS**

- eJET Systems Pvt. Ltd., Noida (April'20- June'20) : Project Sona.Al
  - Built NLP chatbot, resume shortlisting and video interviewing solutions with deep learning to automate recruitment processes
  - Classified resumes to match sequential experience of a candidate with given job opening, using Bi-RNNs and LSTMs
  - Deployed a **CNN** model to score candidate's video resumes by extracting standard soft skills from audio and transcript data
  - Achieved **96.9% average precision** on unseen test data; model in commercial use, **saving 50+ man hours per month**Received **Letter of Recommendation** and **Pre Placement Offer** for excellent work ethics and successful deliverables
- National Tsing Hua University, Taiwan (Institute of Computational Biology, May'19 July'19)
  - Repurposing a set of FDA-approved drugs as allosteric inhibitors to suppress tumor progression and assist chemotherapy
  - Executed in silico screening of over 1312 FDA approved drugs by using softwares Autodock Vina and MDAnalysis
  - Developed a model using **python** that can predict the inhibitory effects of user inputted drugs ID's on tumor progression
  - The machine learning model (**K means clustering**) was used to sum the key features for ranking-order the obtained drugs. Received **Letter of Recommendation** from Prof. Lee Wei Yang for exceptional research work and successful deliverables

#### **PROJECTS**

- Screening of Manure Samples for Presence of Antimicrobial Resistance Bacteria (Prof. Shilpi Sharma, Feb.'19- April'19):
  - Analysed 180 manure samples collected from across the country for the presence of Antibacterial Resistance Bacteria
  - Tested antimicrobial susceptibility for 18 antibiotics on obtained samples to different concentrations over a period of 2 months
- Research and Development of Cloth Sanitary Napkins (Prof. Deepti Gupta, May'18- August'18):
  - Led Development of low-cost biodegradable cloth sanitary napkin in collaboration with Textile Engineering Laboratory
  - Conducted experiments to assess the absorbance properties of textile materials and characterize fuid fow through them
  - Manufactured prototypes of cheap biodegradable cloth pads and did user feedback studies to increase their acceptability
- · Anti-Depression Chatbot, Project Sona.AI: A Cognitive Behavioural Therapy based approach to help employees(July'20)
- Implemented a variation of attention model to classify the polarity of responses from the user's side as positive or negative
- Successfully Completed the MVP and achieved an overall accuracy of 93.1% on the first round of Intent classification

#### **TECHNICAL SKILLS**

- · Softwares: PuTTY, WinSCP, ANSYS, Keras, Pytorch, TensorFlow, SQL, MS Office
- Languages: C++, R, Python (TensorFlow, Scikit-learn, Numpy, Pandas, Scipy, Matplotlib), MATLAB, MySQL

### **EXTRA CURRICULAR ACTIVITIES**

- Enactus IIT Delhi, Project Alo: Participated in 5 Business Plan and case study competitions, representing project Alo
- -Finalist, Eureka'18: Asia's largest Business Plan Competition among 10,000 + teams hosted by E- Cell, IIT Bombay
- -Top 10, Ulncept'18 :showcased Project Alo at Ulncept Incubation Program, an edtech accelerator powered by NUMA
- -Finalist, The Pitch Room, Startup Jalsa'18: dharmshala based investor pitch event, pitched in front of 50+ investors
- -Finalist, Villgro iPitch'18: Finalist in Villgro's annual investment Platform, an Impact Investment B Plan competition
- -Top 24, Enactus National Competition'18: among 100+ teams, judged on business impact by CEOs of KPMG, Unilever

## **POSITIONS OF RESPONSIBILITY**

- Enactus IIT Delhi, Project Alo, Senior Associate (April, 2018 April, 2019) :
  - An idea to change the way that Indians perceive education, through project based hands on learning of real world subjects
  - Co-Led a product design & innovation team of 6 students in collaboration with students of Kamala Nehru College, Delhi
  - Generated a revenue of 1.7 Lakhs through Law, Fashion Designing, Electrical Engineering and Psychology workshops
- Reached 1000+ students and 150+ parents interested in enrollment through market research and gathering contacts

- Organized a hands-on Psychology workshop in a 2 - week long summer camp with 100+ school students of classes 6-10 Disclaimer: All the information on this page is entered by student. Page 1



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## **IIT COURSE**

Institute Degree B.Tech in Biochemical Engineering & Biotechnology Indian Institute of Technology, Delhi

**CGPA** 7.164

## **COURSES DONE**

Introduction To Chemistry, Chemistry Laboratory, Intro. To Computer Science, Intro. To Electrical Engg., Calculus, Intr.to Material Sc. & Engg., Principles Of Biochemistry, General Microbiology, Mass & Energy Balances In Bio., Introduction To Biochem. Engg., Transport Phenomena, Intro. To Biology For Engineer, Bioprocess Technology, Fluid Mechs. For Chem. Enginee, Heat Transfer For Chemical Eng, Molecular Biology & Genetics, Bioprocess Engineering, Bioprocess Engineering Lab, Mass Transfer I, Process Dynamics And Control, Chemical Engineering Lab I, Environmental Science, Biomas Production

## **QUALIFYING EXAM**

• Joint Entrance Examination (JEE) Advanced Rank: 3504 (GE)

### **EXTRA CURRICULAR ACTIVITIES**

- Publicity and Creativity Achead, Sportech'19 BSA (January, 2019 March, 2019)
- Winner, Mentor Group Asian Parliamentary Debate 2017 (November, 2017)

## **POSITIONS OF RESPONSIBILITY**

- Junior Associate, Enactus IIT Delhi (November, 2017 April, 2018):
- Senior Associate, Enactus IIT Delhi (April, 2018 April, 2019):

## **INTERNSHIPS**

• Year: 2020, Company: sona.Al, Profile: Al/ML/NLP intern