

PR Number: 11/ME/18/071 in linkedin.com/in/ashutosh-kr-jha/

EDUCATION & SCHOLASTIC ACHEIVEMENTS

Programme		Institution	%/CGPA	Year of Completion	
B.Tech.(Hons.) Mechanical Engineering Minor: Mathematics for Computer Science		Indian Institute of Technology, Madras	9.0/10.0	2018	
XII (B.I.E., Andhra Pradesh)		Mahathi Junior College	96.7%	2014	
X (C.B.S.E.)		Delhi Public School, Visakhapatnam	10.0/10.0	2012	
Scholastic Achievements	 GPA of 9.71 on Math ele Secured a branch chang Ranked 9 on West Beng the state in top 10. Awa Awarded KVPY Fellows 	ently 26 credits (~1 semester) ahead of the curriculum for B.Tech Mechanical Engineering. of 9.71 on Math electives. GPA of 9 on Statistical Learning Theory electives. red a branch change (top 30 of over 800 students) for strong academic performance . red 9 on West Bengal JEE (Top 0.006% of 120000 applicants) in 2014. The only non-native of tate in top 10 . Awarded Letter of appreciation from the chief minister . reded KVPY Fellowship in 2012, by the Department of Science and Technology, GoI. red in top 4% in the Indian National Olympiad in Informatics (INOI), 2011.			
Relevant Courses	Reinforcement Learning		eep Learning pplied Time Series Analysis omplex Network Analysis		
Skills	 Programming Languages: Python, C, R, MATLAB (>2000 lines in each) Frameworks: Tensorflow, PyTorch, Scikit-learn, Excel (Extremely Proficient in all) 				
PROFESSIONAL EXPERIENCE					

Summer Analyst Goldman Sachs May-Jul 2017	 Replaced the existing frameworks for risk predictions in certain financial instruments by a far more robust framework (a 500% increase in terms of the performance metrics considered). Employed machine learning and time series analysis to improve prediction accuracies of the model. Also delivered a theoretical study on the reasons for failure of several other alternative approaches.
Internship TITAN Company <i>May-Jul 2016</i>	 Designed a cost effective (~10% cost reduction) manufacturing process for forming of sheet gold. Created the first literature survey on non-conventional forming for soft metals in the company. A prototype manufacturing unit based on the designed process was set up in the factory at Hosur.

TECHNICAL PROJECTS & PUBLICATIONS

Multitask in Deep	• The work was presented at a workshop at International Conference on Machine Learning (ICML).			
Reinforcement	The paper is also under review as a poster at Neural Information Processing Systems(NIPS).			
Learning	 Developed a new framework for training multitasking agents. The new agents could learn upto 21 			
Jan-May 2017	tasks simultaneously. The earlier best known result was on 10 tasks (110% improvement).			
Inverted	 Designed an Inverted Pendulum Bot using Arduino for the course on Instrumentation and Control. 			
Pendulum Bot	• Among the best 3 bots out of 40 which balanced indefinitely in the presence of small disturbances.			
Jan-May 2016	■ The bot was kept by the professor as a model bot for the upcoming batches.			
B.Tech. Project	 Primarily working on Few Shot Learning in Deep Reinforcement Learning. 			
Ongoing	 As a side-project, also trying to improve performance of Visual Q&A agents using Deep Learning. 			

POSITIONS OF RESPONSIBILITY

Manager, Career Development Team, International and Alumni Affairs, IIT Madras

2015-2016

- •Witnessed **67.5% increase**(**80 to 134**) in student participation by restructuring **Mentor for Interns** (networking event for students and alumni) in 4 cities Mumbai, Delhi, Bangalore, Chennai.
- •Organized the **first** of its kind: "Career Development Lectures" targeting 8000+ students across all disciplines.
- Executed **Mock GDs and Mock Interview Sessions** for final year students with the help of Alumni across various sectors. **Undergraduate Teaching Assistant, Linear Algebra for Engineers, IIT Madras** *Jul-Nov 2016*
- ■Worked as a **Teaching Assistant** under Dr. Arindama Singh for the Linear Algebra (MA2031) course for ~**200 students**.
- •Primary responsibilities involved conducting weekly tutorial sessions for students and setting assignments for the course.

EXTRA CIRRICULAR ACTIVITIES

Mentoring	• Saathi Mentor: Mentored 8 freshmen, providing holistic guidance and assisting settling into campus.				
	■ MITr Academic Buddy: Mentored 2 freshmen; Saw a rise in their scores by 30% over 3 months.				
Social	Mentor Coordinator, Avanti Fellows:	2016-2017			
	• Led and managed a team of 3 mentors for helping 5 underprivileged students prepare for JEE.				
	• 2 of the mentees joining IITs . 2 others were able to secure a seat at NITs .				
	Project Representative, National Service Scheme, IIT Madras:	2015-2016			
	 Led and mentored a team of 16 for the National Service Scheme Project Education via Blogging. 				
	• Created ~100 articles over the year: 40% increase in the number of articles; 70% increase in views.				
Technical					
Competitions	 Placed 1st among 200 teams at Shaastra JARVIS (Machine Learning Contest), 2017. 				
Interests	 Playing Violin Studying Linguistics Reading Fiction Deba 	ting/GDs			