

YASH BHALGAT

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OBJECTIVE

- To enhance my teaching skills by **continuing to teach further** and help more students
- Improve my research aptitude as a student to be able to excel in both research and academia

EDUCATION

University of Michigan, Ann Arbor, MI

2017-present

Masters Student, Computer Science and Engineering

Indian Institute of Technology, Bombay, India

2013-2017

Bachelor of Technology, Department of Electrical Engineering

- **Honors** in Electrical Engineering, **Minor** in Computer Science
- **GPA:** 9.44/10

Relevant Coursework:

Computer Vision, Wavelets, Machine Learning, High Performance Scientific Computing, Digital Image Processing, Matrix Computations, Design & Analysis of Algorithms, Advanced Topics in Signal Processing, Probability and Data Analysis, Control Theory, Complex Analysis, Microprocessors, Logic in Computer Science

RELEVANT EXPERIENCE

National Program on Technology Enhanced Learning - MOOC

[Fall '16], [Spring '17]

Position: Teaching Assistant

- Created content for the online course including lecture slides and assignments
- Helped solve the doubts posted on discussion forums by the students

Undergraduate Teaching Assistant - Quantum Mechanics and Applications

[Fall '14], [Summer '15]

Position: Teaching Assistant

- Assisted and guided a batch of 50 first year students as a Tutor in this course for 2 semesters
- Besides weekly sessions, setting and evaluating of quizzes, conducted extra sessions for students needing special attention improve overall performance

Mars Society of India, IIT Bombay

[Aug '14 – Mar '16]

Position: Head, Navigation and Image Processing team

- Lead a team of 5 students working on building a semi-autonomous Mars rover
- Built a system in Robotic Operating System to analyze video input and navigate the rover
- Presented the rover at the STAB expo to the Ministry of Human Resources Department of Govt. of India

PRESENTATIONS AND TALKS

- *Scattering Wavelets Network based Latent Fingerprint Enhancement*, Research Scholars Conclave, College of Engineering, Pune (COEP) (March '17)
- *Stamp Processing with Exemplar Features*, 12th IAPR workshop on Document Analysis Systems (DAS), Santorini, Greece (April '16)
- *How can deep neural networks be taught to classify images?*, Blog, Electronics Club, IIT Bombay
- *Emotion from Speech*, TeQIP Seminar Poster Presentation, IIT Bombay, India (March '16)

SCHOLASTIC ACHIEVEMENTS

- Selected amongst the **top 10** students in the country as a **Cargill Global Scholar** 2014-15 for excellence in leadership and academics. Also part of the Indian cohort at the global seminar in Minneapolis, 2016
- **All India Rank (AIR) 12** in **IITJEE-mains** 2013 and **AIR 155** in **JEE-advanced** 2013 examination
- Selected among top 300 of the nation to compete in all three Olympiads: **INPhO**, **INChO** and **INAO** in 2013 and **INMO** (Indian National Mathematics Olympiad) in 2011
- Achieved perfect Grade Point of **10** (CPI/GPA) in my **4th semester** at IIT Bombay

RELEVANT SKILLS

Programming Languages: C/C++, Python, Bash, Java, Verilog, R

Software packages / libs: Theano, TensorFlow, OpenCV, Praat, CUDA, (basic) MPI, MATLAB, PyEDA

Operating System: Linux, Windows, ROS (Robot Operating System)