

Aditya Sharma

CONTACT INFORMATION	303, CDS Indian Institute of Science (IISc) Bangalore, KA 560012 India	Phone: +91 9148661405 LinkedIn: in.linkedin.com/in/adityabits E-mail: adityasharma@iisc.ac.in WWW: http://adityasharma.space/
EDUCATION	Indian Institute of Science , Bangalore, India <i>MTech (Research), Department of Computational and Data Sciences (CDS), July 2019 (tentative)</i> Advisor: Dr Partha Talukdar Birla Institute of Technology and Science , Pilani, India <i>B.E. (hons.) Electrical and Electronics Engineering, June 2016</i> Thesis Topic: “ Asynchronous Distributed Stochastic Convex Optimization in MPI ” Advisors: Dr Partha Talukdar (IISc), Dr Ashish Mishra (BITS, Pilani)	
HONOURS AND AWARDS	’ Top 10 ’ finish in the famed Allen Ai Science Challenge on Kaggle , 2016. Invited to attend the 29th Annual AIAA/USU Conference on Small Satellites at Utah, USA on a \$2400 Travel Award , 2015.	
PUBLICATIONS	Aditya Sharma, Zarana Parekh, Partha Talukdar. “ <i>Speeding up Reinforcement Learning-based Information Extraction Training using Asynchronous Methods.</i> ” EMNLP, 2017. Aditya Sharma, Pranet Verma, Ashish Mishra, K. Solomon Raju. “ <i>A Modular Approach to Random Task Graph Generation.</i> ” Indian Journal of Science and Technology, 2016.	
PROFESSIONAL EXPERIENCE	Indian Institute of Science , Bangalore, India <i>MALL Lab, Department of Computational and Data Sciences (CDS)</i> <i>Research Assistant</i> August, 2016 - July, 2017 Worked with Dr Partha Talukdar on applications of Deep Reinforcement Learning in Natural Language Processing . Specifically, worked on automating parts of the Knowledge Graph generation pipeline using intelligent agents. CERN (European Organization for Nuclear Research) , Geneva, Switzerland <i>Intern (Google Summer of Code)</i> May, 2016 - August, 2016 Added support for compressed Deep Neural Networks along the lines of HashedNets to <i>TMVA</i> (Toolkit for Multivariate Data Analysis with ROOT), a popular open source software for data analysis used by the High Energy Physics community, maintained by the Software Team at CERN. Indian Institute of Science , Bangalore, India <i>MALL Lab, Department of Computational and Data Sciences (CDS)</i> <i>Undergraduate Thesis Intern</i> December, 2015 - May, 2016 <i>Summer Research Intern</i> May, 2015 - July, 2015 * Implemented distributed Representation Learning models for NLP on the <i>Cray XC40</i> supercomputer SahasraT, the fastest supercomputer in India , using MPI-OpenMP. * Worked with Dr Partha Talukdar on asynchronous parallel implementation of convex optimization algorithm Stochastic Gradient Descent. Developed a <i>Parameter Server</i> infrastructure on Cray XC40, from scratch, in MPI. Centre for Development of Imaging Technology , Trivandrum, India <i>Summer Research Intern</i> May, 2014 - July, 2014 Implemented a lossless version of the JPEG2000 image compression algorithm in MATLAB, which was used for medical imaging applications by C-DIT.	
PROJECTS	BITS Pilani Student Satellite Team <i>Founder and Team Leader</i> November, 2013 - October, 2015 Lead a team of 20 students to build a low cost hyperspectral imaging 3U CubeSat weighing less than 10 kg. Engineered an FPGA based System-on-Chip low power, high performance data processor and architected the flight software for the satellite from ground up.	