

Hima Varsha Dureddy

| | | |
|-------------------------|--|--|
| CONTACT INFORMATION | <i>E-mail:</i> varshahima1994@gmail.com <i>Data Science StackExchange:</i> https://goo.gl/IozUz6 | <i>Github:</i> https://github.com/HimaVarsha94 (412) 616 6447 |
| EDUCATION | Carnegie Mellon University , USA Master of Computational Data Science, School of Computer Science | 2018 |
| | Indian Institute of Technology Hyderabad , India B. Tech. in Computer Science and Engineering, GPA: 9.10/10 (Top 5) 9.24/10 (Junior and senior years) | 2016 |
| PROFESSIONAL EXPERIENCE | Data Scientist , <i>Setu.Serv Informatics</i> , India <ul style="list-style-type: none">• Pioneered deep learning models in the company to bring the voice of customers to clients.• My work involved collecting and classifying millions of reviews into aspects and analyzing aspect level sentiment. Implemented CNNs, bidirectional RNNs with ensemble learning to improve the benchmarked performances.• Researched and came up with ways to handle long sentences by dividing into phrases and capturing non-adjacent contextual words by using skipgrams or dependency pair relations. <i>Technologies: Python, Theano, Keras, Scikit-Learn</i> | June, 2016 - June 2017 |
| | Summer Intern , <i>Strand Life Sciences</i> , Bangalore, India Built a real-time visualization website from scratch. Deployed it in StranOmics software and is currently being used by the staff. <i>Technologies: AngularJS, HTML, CSS, MySQL and Java</i> | May - July, 2015 |
| | Summer Intern , <i>SenSen Networks</i> , Melbourne Worked with Prof. Subhash Challa, Founder & CEO and a co-author of the reference text “Fundamentals of Object Tracking” to build an application to detect specific objects in grocery images. <i>Technologies: Python, OpenCV, CUDA</i> | June - July, 2012 |
| TECHNICAL SKILLS | Programming Languages: C, C++, Python, Java Others: Keras, Pandas, Git, Scikit-Learn, Torch, AngularJS, HTML, CSS, MySQL | |
| RESEARCH EXPERIENCE | Summer Research Intern <i>Employer: Dr. Sathya Peri, IIT Hyderabad, Technologies: c++, intel tbb</i> Worked on a funded research project with Dr. Sathya Peri involving Software Transactional Memory (STM) algorithms which are a convenient interface for a programmer to access shared memory. Developed efficient middleware based on multi-version transactional memory system for multi-core systems. Also implemented Lazy linked list to improve the operations/sec unit of the threads running concurrently to compare the performance of the STM. | May - June, 2016 |
| | Teaching Assistant <i>Employer: Dr. Sathya Peri, Associate Professor</i> Took a formal appointment as a teaching assistant for <i>CS5280 Concurrency Control in Transactional Systems</i> for 2 semesters and <i>Operating Systems</i> for one semester. The work involved conducting tutorials, grading assignments and providing assistance during practical sessions. | January, 2015 - May, 2016 |
| SELECTED PROJECTS | Neural Turing Machines <i>Advisor: Dr. Vineeth Balasubramanyam</i> Implemented not only Neural Turing Machines by Alex Graves et. al using Lua, Torch but also added implementations of GRU along with the LSTM. Made a comparative study of performances by GRU and LSTM on various algorithmic tasks like convolution, sorting and so on. | February - April, 2016 |
| | Action Recognition in Videos <i>Advisor: Dr. Vineeth Balasubramanyam</i> Made an application to predict the sport in a video which was chosen from a subset of <i>UCF Sports</i> dataset. The features were generated using <i>HOG+HOF+MBH (Dense Trajectories)</i> , made into Bag | Aug - Nov, 2015 |

of Words descriptors by k-means clustering. It was trained using SVM and achieved an accuracy of about 30% on 8 sports.

QuickSlots v2.0

February - April, 2016

Advisor: Dr. Ramakrishna Upadrasta, Dr. MV Panduranga Rao

Built a Timetable Scheduler for the *Computer Science Department, IIT Hyderabad*. The input to the system is faculty's preferences and the output is a consolidated timetable. The problem was modeled as **Min Cost Bipartite Matching**. A mathematical formulation for edge weights was created based on factors like time and venue conflicts, student batch size and the type of course.

Optimistic Concurrency Control, *Advisor: Sathya Peri*

August, 2015 - April 2016

Contributed to an **accepted poster presentation** in the Ph.D. Forum of *IPDPS 2016* and also to the CSE day, IIT Hyderabad. Worked on an optimistic version of FOCC and improved the existing performance of the FOCC reducing abort counts by using independent locks on data items.

PUBLICATIONS

Starvation Freedom in Transactional Memory Systems, Peri et al., *Algorithms & Architectures for Distributed Data Analytics Workshop hosted by International Conference on Distributed Computing and Networking, 2017* (accepted as work-in-progress)

HONORS AND AWARDS

Data Science StackExchange Top Contributor (**Ranked top 20** among 20,000 members, 2016)

Perfect 10/10 SGPA in over 60 students for sixth semester, 2015

Jenesys 2.0 - International Youth Exchange Program to Japan, 2014 - Only student from Computer Science selected to visit Japan, to observe cutting-edge technology, local industries, experience, and exchange traditional cultures by homestay with a Japanese family.

Indian Youth Delegation member, International Exchange Program to China - the only student from IITH of over 1700 students and also one of the less than 30 students from all over India in 2013 to visit China where I had the honor of meeting the *Chinese Premier, Li Keqiang*

POSITIONS OF RESPONSIBILITY

Manager of nvision, Techfest of IIT Hyderabad

2014 - 2015

Led a team of 45 core members, 200 volunteers to organize 52 events across various technical domains like hackathons, code-a-bot and made history as fest with highest participant turnout in IITH. My team and I also visited underprivileged kids and donated books with money raised.

National Sports Organisation Member, IIT Hyderabad

2012 - 2016

Have been the Badminton team captain for 2 years and also represented IITH's Badminton team in prestigious *Inter IIT Sports* event in IIT Guwahati.

Training and Placement Cell coordinator, IIT Hyderabad

2014 - 2016

Handled the complete pipeline from contacting companies, setting up interviews, training students to finally handing over final placement offer documents. The placements improved compared to the previous year with an increase in average pay.

Manager, Entrepreneurship Cell, IIT Hyderabad

2013 - 2014

Was responsible for managing city-wide events for the club. My team introduced the *first ever lecture series* called *Spark* which invited successful entrepreneurs for lectures and interaction.