Shreenivas Bharadwaj

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EDUCATION

UCSD
University of California San Diego
MS in Computer Science
Fall '18- | California, USA

NIT, TRICHY
National Institute of Technology
B.Tech. in Computer Science
2014-18 | Tamilnadu, India (8.31/10)

LINKS

Github: **shreenibhar**
Gmail: **vshreenivasbharadwaj**

COURSEWORK

UNDERGRADUATE
Artificial Intelligence
Machine Learning
Data Warehouse and Data Mining
Design and Analysis of Parallel algorithms
Data Structures and Algorithms
Database Management Systems
Operating Systems
Computer Networks

SKILLS

PROGRAMMING
Frequent usage:
•C/C++ •Python •Android-Java •Cuda
•Matlab •LaTeX •Tensorflow •Pytorch
Occasional usage:
•HTML •CSS •Javascript •Jquery
•MySQL •Bash
Familiar usage:
•Django

SOCIETIES

2015-18 **Delta** Web-ops team, NITT

AWARDS

•All India Senior Secondary Examination, 2014, Total: 482/500, Top 1 %
•Best Student Paper Award, Vortex, NIT Trichy
•AISSE School 1st in Physics and CS, 2nd in Math

EXPERIENCE

AMAZON
Summer Internship (May'17 – July'17)
- Created a utility service in Kindle Digital Commerce Platform using Java, Coral framework and Spring.
- Handled tickets related to the service.

RESEARCH

HIGH PERFORMANCE COMPUTING WITH GPUS, IIT DELHI
Acceleration of Vector Auto Regression (July'17 - Dec'17)
- Achieved 650x speedup over the regular CPU code performance in granger analysis of fMRI data.
- Tight bound solutions were computed for Lasso regression models.
- Implemented in Nvidia CUDA platform.

NETWORKING OPTIMIZATION, NIT TRICHY
MAC layer optimization, Network Lab (July'16 – Dec'16)
- Optimized the MAC 802.11 wireless network Contention Window mechanism.
- Implemented in NS2 simulator. Paper was published in Vol.7 No.2 IJDIWC(SDIWC) journal. Links: **Journal Paper**

NAMED ENTITY RECOGNITION, IIIT HYDERABAD
LTRC Lab (May'16 – July'16)
- Improved the accuracy of Named Entity Recognition task for Hindi by 15%.
- Achieved accuracy in English task reached 90%.
- Implemented in Python Tensorflow framework. Paper was published in the proceedings of ICON-2016 conference indexed in ACL. Links: **Conference, Paper, Github**

PROJECTS

AI BOT FOR GIPF GAME, NIT TRICHY
Final year thesis (Jan'18 - April'18)
- Defeated the current champion bot in GIPF.
- Analyzed various strategies (Monte Carlo Tree Search, Negascout).

MUSIC RECOGNITION AND GENERATION
Recognizing instruments in Polyphonic Audio Samples (Jan'18 - Feb'18)
- Improved accuracy by 10% in the IRMAS dataset.
- Used LSTM neural networks with Mel Cepstral features.
- Implemented with python Pytorch framework.
- Music created by generating Spectrograms using DC-GAN.

DELTA CLUB PROJECTS
2015-18
- Developed inventory management site with DJANGO and MySQL database for course project.
- Developed a campus communication application in android (PHP backend).
- Developed Tic-Tac-Toe, Chess android games with AI in android for club hackathon.