

# Shreenivas Bharadwaj Venkataramanan

shreenibhar.github.io | LinkedIn:// in/shreenibhar | sbvenkat@ucsd.edu | +1 858.366.2933  
Github:// shreenibhar | GoogleScholar:// Shreenivas Bharadwaj

## EDUCATION

**UNIVERSITY OF CALIFORNIA, SAN DIEGO** | MASTERS IN CS

Expected March'20 | La Jolla, CA

**NATIONAL INSTITUTE OF TECHNOLOGY, TRICHY** | B.TECH. IN CS | GPA: 8.31/10

July'14-May'18 | Trichy, India

## TECHNICAL SKILLS

### PROGRAMMING LANGUAGES AND TOOLS

•C/C++ •Python •Java •Matlab •HTML •CSS •Java Script •Bash •SQL •Git

### FRAMEWORKS

•Android Studio •Tensorflow •Pytorch •Jquery •Flask •CUDA/cuBLAS/Thrust

## WORK EXPERIENCE

### AMAZON | SOFTWARE DEVELOPMENT INTERN

May'17-July'17 | Chennai, India | (Java, HTML, CSS, Java Script/Jquery, SQL, Bash)

- Designed and deployed an internal tool page service in the Kindle Digital Commerce Platform using Coral framework.
- Executed Amazon's development process, code reviews, wrote high coverage unit tests, used Amazon's build/test/integration tools.

### DELTA | UNIVERSITY DEVELOPMENT CLUB MEMBER

2015-18 | Trichy, India | (Flask, SQL, PHP, Android Studio)

- Developed inventory management site with Flask and MySQL database.
- Collaborated and created a campus communication application in android (PHP backend).
- Devised AI for Tic-Tac-Toe, Chess and built game in android for hackathons.

## RESEARCH

### ACCELERATION OF VECTOR AUTO REGRESSION WITH GPUS | RESEARCH INTERN

July'17-Dec'17 | Indian Institute of Technology, Delhi | CUDA/cuBLAS/Thrust, Matlab

Achieved 650x speedup over the regular CPU code. Computed tight bound solutions for Lasso regression models.

### MAC LAYER OPTIMIZATION, DYNAMIC LEARNING | COURSE RESEARCH

July'16-Dec'16 | National Institute of Technology, Trichy | C, C++, NS2

Increased throughput by 3% (10Kbps) approx. at max traffic (80 stations) by optimizing the MAC 802.11 Contention Window mechanism. Used Newton's regression to solve complex equations. Published in IJDIWC journal.

### NAMED ENTITY RECOGNITION | RESEARCH INTERN

May'16-July'16 | IIIT, Hyderabad | Python, Tensorflow

Improved accuracy by 15% in the Named Entity Recognition task for Hindi. Achieved 90% accuracy in the English task. LSTM networks and Word Embeddings were used. Published in the proceedings of ICON-2016 conference indexed in ACL.

## PROJECTS

### GAME STRATEGIES FOR THE GIPF GAME | FINAL YEAR THESIS

Jan'18-April'18 | National Institute of Technology, Trichy | C, C++, Python

Defeated the current champion bot in GIPF. Analyzed various strategies (Monte Carlo Tree Search, Negascout).

### MUSIC RECOGNITION AND GENERATION | PERSONAL PROJECT

Jan'17-May'17 | Python, Pytorch

Improved accuracy by 10% in the IRMAS dataset. Used LSTM neural networks with Mel Cepstral features. Music created by generating Spectrograms using Deep Convolutional GANs.

## PUBLICATIONS

- Balasubramanian, N., **Venkataramanan, S.B.** and Aathma, A., 2017. Dynamic Optimization of IEEE 802.11 DCF based on Active Stations and Collision Probability. Intl Journal of Digital Information and Wireless Communications, 7(2), pp.66-75.
- Athavale, V., **Bharadwaj, S.**, Pamecha, M., Prabhu, A. and Shrivastava, M., 2016. Towards deep learning in hindi ner: An approach to tackle the labelled data scarcity. arXiv preprint arXiv:1610.09756.