

Shreenivas Bharadwaj Venkataramanan

☎ (+1) 858-366-2933 | ✉ sbvenkat@ucsd.edu | 🏠 cseweb.ucsd.edu/~sbvenkat | 📱 shreenibhar | 🌐 shreenibhar

Education

University of California, San Diego

La Jolla, CA

M.S. IN COMPUTER SCIENCE | CUM. GPA: 3.88/4

Sept 2018 - March 2020 (**Expected**)

- Neural Networks, AI-Probabilistic Reason & Learning, Web Mining & Recommendation Systems, Natural language Processing

National Institute of Technology, Trichy

Tiruchirappalli, India

B.TECH. IN COMPUTER SCIENCE AND ENGINEERING | CUM. GPA: 8.31/10

July 2014 - May 2018

Skills

Programming Languages Python, C/C++, Java, Matlab, HTML, CSS, Java Script, Bash, SQL

Frameworks and Tools Pytorch, Tensorflow, CUDA/cuBLAS/Thrust, Flask, Jquery, Git, Android Studio

Software Development Experience

Google

Mountain View, California

SOFTWARE ENGINEERING INTERN | (C++)

June 2019 - September 2019

- Designing a back-fill system in the Google Assistant micro services infrastructure.
- Enabled a data push mechanism. Integrated the experimental framework into the system. Implemented a diffing method to measure the difference between two protocol buffers. Achieved 0% difference in the response path for 100% of the queries.
- Prototype testing and Launched the feature with an experiment controlled environment.

Amazon

Chennai, India

SOFTWARE DEVELOPMENT INTERN | (JAVA, HTML, CSS, JAVA SCRIPT/JQUERY, SQL, BASH)

May 2017 - July 2017

- Designed an internal tool in the Kindle Digital Commerce Platform to expose the API safely to other teams.
- Reduced the overhead of querying time for listing book loans by roughly 50% using batch APIs. Used LDAP orchestrator for authentication. Implemented statistical tree summaries to save time in investigation.
- Used Amazon's build/test/deployment tools and successfully deployed the project.

Research Experience

Acceleration of Vector Auto Regression with GPUs

Indian Institute of Technology, Delhi

RESEARCH INTERN | (C++,CUDA/cuBLAS/THRUST, MATLAB)

July 2017 - Dec 2017

- Accelerated Vector Auto Regression models using GPUs and computed tight bound solutions for Lasso regression models.
- Achieved 650x speedup over the regular CPU code.

Named Entity Recognition

International Institute of Information Technology, Hyderabad

RESEARCH INTERN | (PYTHON, TENSORFLOW)

May 2016 - July 2016

- Performed NER task using LSTM networks and Word Embeddings.
- Improved accuracy by 15% for Hindi. Achieved 90% accuracy in English. Published in ICON-2016 conference indexed in ACL.

Projects

ChatterBot - A Text Classifier Bot

University of California, San Diego

COURSE PROJECT | (PYTHON, DIALOGFLOW, PYTORCH, FLASK)

April 2019 - June 2019

- Implemented a Dialogflow chat bot which can classify text with Flask backend.
- Trained LSTM neural networks to classify text and deployed it in Flask. Designed a conversational flow for the Chat Bot. Implemented a delay response mechanism to handle latency for explanation queries. Optimized query latency by using cached models.
- Achieved 99% accuracy for the text classification tasks and a max query latency of 5s.

Other Projects and Experiences

- Text to Image using LSTM and GANs, [Instrument Recognition using Pytorch](#), Game Strategies for GIPF game using Monte Carlo Tree Search, Dynamic MAC layer optimization using C++/NS2.
- Teaching Assistant @ UCSD for "Intro to Python" COGS 18'Spring.

Publications

Acceleration of Sparse Vector Autoregressive Modeling using GPUs

HIGH PERFORMANCE COMPUTING, DATA, AND ANALYTICS, IEEE

2019

Dynamic Optimization of IEEE 802.11 DCF based on Active Stations and Collision Prob.

INTERNATIONAL JOURNAL OF DIGITAL INFORMATION AND WIRELESS COMMUNICATIONS

2017

Towards deep learning in Hindi NER: An approach to tackle the labelled data scarcity

INTERNATIONAL CONFERENCE ON NATURAL LANGUAGE PROCESSING, ACL

2016