

Sravya Amudapuram

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EDUCATION

- **University of Minnesota, Twin Cities** Minneapolis, U.S
Master's in Computer Science; 3.95/4.0 *Sep'18 – May'20(Expected)*
- **Indian Institute of Technology** Guwahati, India
Bachelor of Technology in Mathematics and Computing *Jul. 2011 – Jun. 2015*

PROGRAMMING SKILLS

- **Languages:** Java(Advanced), C/C++(Advanced), Python(Advanced), Shell Scripting, R(Intermediate)
- **Technologies:** TensorFlow, Keras, PyTorch, OpenAI Gym, Kafka, Hadoop, AWS, Spring, InfluxDB, MySQL
- **Relevant Coursework:** Machine Learning for Systems, Intro to Data Mining, Recommender Systems, Machine Learning, Distributed Systems

ACADEMIC PROJECTS

- **Speech Emotion Analysis (Graduate Research Assistant):** Built an interactive application to collect raw audio data for emotion analysis. Implemented a RNN(used CNNs to tune features) with RAVDESS data as training set to classify 8 different emotions with 64% accuracy
- **Denoising AutoEncoder:** Developed a model using PyTorch that denoises images using an auto encoder. It denoises MNIST images with gaussian noise to human-readable images. Also, implemented a Variational AutoEncoder with fully connected layers to denoise MNIST images.
- **Histopathologic Cancer Detection:** Built a binary classifier that detects a tumor in the given image with AUROC score of .96. Implemented a model with weights initialized from transfer learning of Xception and NASNet
- **Reinforcement learning for dynamic database indexing [OpenAI Gym, Python, Deep-Q learning]:** Proof of concept to formulate database indexing as a game. Formulated Deep-Q learning algorithm to make key look-up faster and adapt to dynamic data distribution
- **Movie Recommender:** Built a neural network recommender for movies, using keras on the MovieLens 1M dataset which strives to minimize RMSE. This model beats the FunkSVD, ALS recommender performance.
- **Routing in ad-hoc Cognitive Radio Networks using game theory:** Analyzed the routing challenges incurred by spectrum mobility in ad-hoc cognitive radio networks. Designed a routing protocol using game theory to address trade-off between routing and switching costs in such networks

EXPERIENCE

- **HPE Nimble Storage** Durham, U.S
Software Developer Intern *May 2019 - Aug 2019*
 - **Monitoring & Analytics Platform:** Designed a prototype that collects data from Proxies, Switches, Storage Arrays, AWS and Azure VMs and stores in a time-series DB for dashboards and real-time alerting
- **Visa Inc** Bangalore, India
Senior Software Engineer *Jul 2015 - July 2018*
 - **Search Platform:** Developed a Search Platform, a multi-threaded, high-throughput and reliable Java service to connect Kafka and Solr for faster querying in real time, using Apache Solr, Kafka, and Zookeeper
 - **mVisa:** Built a completely configurable and customizable mobile SDK to help maintain uniform user interface across mVisa(Scan QR & Pay) enabled applications
- **Samsung Research and Development** Bangalore, India
Student Trainee *May 2014 - Jul 2014*
 - Developed a platform-independent client manager interface to pipeline the communication between clients and server to maintain a uniform interface for applications running on Android and Tizen

ACHIEVEMENTS

- Recipient of Merit Cum Means scholarship of IIT Guwahati(2011-2015)
- Secured 99.4 percentile among 500k engineering aspirants in India(2011)