

SHREESHA N MURTHY

Las Vegas, NV, 89118 | Ph: +1-7747019413 | email: shreesha.n@outlook.com

www.linkedin.com/in/shreesha-n | <https://shreeshan.github.io> | www.github.com/ShreeshaN

EDUCATION

Master of Science in Data Science | August 2019 – May 2021, Worcester Polytechnic Institute (GPA: 4.0/4.0)

Bachelor of Engineering in Computer Science | May 2011 – May 2015, VT University

RELEVANT COURSEWORK

Statistics, Big Data Analytics, Data Structures, Machine Learning, Deep Learning, Business Intelligence

WORK EXPERIENCE

Cushion.ai | San Francisco, CA

Machine Learning Engineer, June 2021 – Present

- Develop, Test, Deploy & Monitor machine learning models for credit-risk and consumer bill detection use cases.
- Develop strategies to collect new data required for powering Cushion's offerings through data-driven approach.

RazorThink Technologies | India

Artificial Intelligence Engineer, Jan 2016 – July 2019

- Built & trained a Deep learning solution for Character Recognition on a multi-GPU distributed pipeline, achieving character accuracy of 92%. The system outperformed Google Vision and Tesseract on noisy images. Briefly inspired by [Graves, et al., 2006](#)
- Designed a Deep learning system to parse resumes and rank them based on job descriptions.
- The above system involved a Doc2Vec model. Achieved 94% sentence level accuracy, cut down resume screening time from 10 days to 1.5 hours for 1000 resumes.
- Built a Feed Forward Neural Network to explain predictions made by a Convolutional NN using gradient descent optimization to derive important variables and textual explanations.
- The above system cut operation costs by 81% (from 8 hours to 1.5 hours) to interpret predictions for 1M customers.

Software Engineer, July 2015 – Dec 2015

- Built web applications/rest services in Java/Python using Spring/Flask Frameworks.
- Built and maintained database models in MySQL and MongoDB.

RESEARCH PROJECTS

Differential Learning using Neural Network Pruning – [Paper](#) | [Github](#) | [Slides](#)

- Devised on a novel technique to prune nodes of an FFN to optimize model's memory footprint and inference time with a goal to retain only crucial connections in the network.
- Gained 85% accuracy on Fashion-MNIST in 1400 training iterations vs 7000 training iterations with plain FFN*.

SKILLS

- **Languages:** Python, Java, Scala, JavaScript, TypeScript, R
- **Frameworks and Libraries:** TensorFlow, PyTorch, Hadoop, Spark, Kafka, AWS SQS
- **ML Algorithms:** Neural Nets (CNN, LSTM, Transformers), SVM, Random Forests, XGBoost, PCA, t-SNE
- **MLOps:** Airflow, TensorflowX, Docker, Weights & Biases, Google Cloud (GCP), Amazon Web Services (AWS)
- **Databases:** SQL, MongoDB, Cassandra(basic)

PUBLICATIONS

- [S. N. Murthy, et al., *DeepSEAS: Ailment Sensing using Coupled LSTM Autoencoders*, IEEE BigData 2020](#) | [Slides](#)
- [S. N. Murthy, E. Agu, *Deep Anomaly Detection methods to passively detect COVID-19 from Audio*, ICDH 2020](#) | [Slides](#) | [Github](#) | [Thesis](#)