Sravani Ramishetty

(551) 697-9298 | sramishe@purdue.edu | linkedin.com/in/sravaniramishetty/

PROFILE

Languages: Python, SQL, C++, Hive, Bash/Shell, Java, Scala.

Technologies: Hadoop, Spark, Tableau, Kafka, MongoDB, AWS, BigQuery, Github, Excel.

Libraries and Framework: Scikit-learn, XGBoost, PyTorch, Numpy, Pandas, Tensorflow, Keras, Matplotlib.

EDUCATION

Purdue University, West Lafayette, IN Expected May 2023

Master of Science in Computer Engineering

Thesis: Communication-efficient algorithms for Multi-Agent Reinforcement Learning.

Abstract: Developing a Policy Gradient algorithm with Periodic Averaging and Quantization (PGPAQ) to address communication and scalability challenges in distributed policy optimization in multi-agent reinforcement learning. The method achieves near-optimal theoretical guarantees and demonstrates a communication-computation trade-off in real-world applications.

Indian Institute of Technology, Madras (IIT-M) May 2018

Bachelor of Technology in Electrical Engineering

PROFESSIONAL EXPERIENCE

Software Development Engineer Intern– Amazon– Austin, US September 2022-December 2022

Performance Investigation of Cache Eviction Policies in Alexa Devices (C++, SQL)

- Built a simulation driver to mimic the Alexa Devices caching mechanism on collected skill usage pattern.
- Implemented LRU, LFU and GDSF cache policies and analyzed various performance characteristics such as cache hit rate, cache miss rate, network bandwidth to recommend best policy.

Data Engineer– Citibank– Chennai, India July 2018-July 2021

Customer DNA and Segmentation (Pyspark, Java, SQL, Hive, Tableau)

- Built an automation utility to create unified customer layer to collect, cleanse, standardize and activate first, second and third party customer data from any source by deriving 360 Data point views.
- Modeled the relationships between customers and their interactions with products, segmented these customers using **K-Means clustering** and labeled the clusters by their characteristics.

Kafka Events Generation (Pyspark, Kafka, MongoDB, SQL, Hive)

- Led a team of 6 to build high performance event driven pipelines for 20+ use cases for analytics dashboards, real-time banking experience, alerts, personalization and notifications.
- Partnered with 4 business analysts and implemented data imputation and data profiling for new KPIs, deployed centralized data layer to capture the journey of all contacts established with clients.

Digital Forms Unstructured data to Structured (Pyspark, SQL, Hive, SAS)

- Created spark framework to convert unstructured data entered by customers and prospects in Digital channels to structured data and process over 50,000 queries each day.
- Received process champion award for reducing computation time by 5 hours with spark optimization techniques, conducted root cause analysis on data to identify customer issue with products.
- Transformed 5 SAS business models to Pyspark models in EAP Hadoop platform resulting in cut down of process time by 12 hours.

RELEVANT COURSES

- **Machine Learning and Algorithms:** Artificial Intelligence (ECE570); Deep Learning (ECE 695); Pattern Recognition (ECE 662); Computational Methods and Models (ECE608).
- **Mathematics**: Linear Algebra & Its Applications (MA511); Random Variables (ECE600).

ACADEMIC PROJECTS AND EXPERIENCE

Person Pose Estimation and Comparison (Pytorch, OpenCV) August 2021-December 2021

- Reproduced the CVPR multi- person pose estimation results with a 65% accuracy using Faster RCNN.
- Focused on person detection and pose estimation by solving binary classification and 2-D regression problem for individual position and key point.