Sreenivasan Ramesh

(480) 304-1072 | sreenivasan.ramesh@gmail.com
sramesh.me
sreenivasanramesh | sreenivasanramesh

Education

- **Arizona State University** — *Tempe, AZ*
  MS in Computer Science; GPA: 3.7 — *August 2019 – Present*
- **PES Institute of Technology** — *Bangalore, India*
  BE in Computer Science; First Class with Distinction — *August 2013 – July 2017*

***Relevant Subjects**: Deep Learning, Natural Language Processing, Machine Learning Systems, Data Mining, Artificial Intelligence, Data Structures, Algorithms, Software Engineering*

Experience

- **Ancestry**
  Software Engineering Intern — *June 2020 – August 2020*
  - Designed and built a highly scalable, fault-tolerant, **serverless alerting system** to push notifications to multiple mediums, mainly used for anomaly and threat detection.
- **Sprinklr**
  Software Engineer — *July 2017 – July 2019*
  - Designed an **auto-scaling framework** based on custom metrics and historical data, which helped to significantly reduce operational costs and minimize application latency.
  - Built a framework that uses **Vector Auto Regression** to find seasonality and trends on multi-variate, data which was utilized for **alert prediction, anomaly detection, and capacity planning**.
  - Developed a real-time resource management web application, and built a CI/CD pipeline, to run automated tests ensuring code quality, and enabling automated deployments across multiple environments.
  - Proposed, prototyped and built multiple **data visualization** components for heterogeneous data collected from multiple data stores.
  - Awarded employee of the quarter, Q4 2018; mentored 4 new employees and oversaw their progress.

Selected Projects

- **Music Generation**: Generated classical piano scores using Attention networks and Bidirectional LSTMs.
- **Neural Machine Translation**: Implemented the Transformer architecture from Attention Is All You Need and achieved a BLEU score of 35.08 on the DE-EN translation task.
- **Meal Detection for Insulin Administration**: Analyzed data from glucose monitors to detect if a person is having a meal, in order to administer insulin. We extracted features on CGM data and used a voting classifier with Extremely Randomized Trees, Random Forests and XGBoost to achieve an accuracy of 81%.
- **Short-Term Trend Forecasting**: Used Asynchronous Adaptive Boosting and Extremely Randomized Trees with random under-sampling to accurately predict the short-term trend of stock prices using a combination of technical indicators and sentiment from financial articles as features to achieve an accuracy of 78%.
- **Autonomous Inventory Management Robot using Reinforcement Learning**: Used an epsilon-greedy q-learning approach to plan for a robot to pick up objects and pace them in their correct locations.
- **Movie Recommendation**: Implemented a recommendation engine, with a User Based Collaborative Filtering algorithm, to dynamically recommend a set of movies based on user similarity score.

Skillset

- **Languages**: Python, Java, Bash/Shell, Perl, C/C++, PHP, Ansible
- **Frameworks**: Tensorflow, PyTorch, torchtext, HuggingFace Transformers, Scikit-Learn, Spring, Tox, Flask
- **Databases**: MySQL, MongoDB, ElasticSearch
- **Web Technologies**: Javascript, HTML, CSS, jQuery, HTTP, JSON, Rest API
- **Others**: AWS, Git, Jenkins, CI/CD, Kafka, Docker, Kubernetes, Kibana, InfluxDB, Graylog