

Vinya Somayajula

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EDUCATION

University of Southern California Los Angeles, CA
Master of Science in Computer Science Jan 2021-Dec 2022
Relevant Coursework: Machine Learning, Deep Learning, Data Mining, Databases, Natural language Processing

Sreenidhi Institute of Science and Technology Hyderabad, India
Bachelor of Technology in Computer Science Aug 2015-May 2019
Relevant Coursework: Design and Analysis of Algorithms, Foundations of Artificial Intelligence, Data Analytics

EXPERIENCE

Software Development Intern | *SQL, MariaDB, Postgres, SQL Server Python, ActiveMQ* Remote, USA
Artha Solutions May 2022-Aug 2022

- Develop python code to ingest data from any relational database or data warehouse queried with SQL and perform data governance process to deliver data driven insights

Cloud Engineer | *Python, AWS, Azure, Oracle Cloud, S3, Elasticsearch, Lambda, serverless, NoSQL* Hyderabad, India
Deloitte AERS India Pvt Ltd Jan 2019-Dec 2020

- Engaged a leading United States financial services company client to generate a DevSecOps workflow on AWS leveraging services EC2, S3, Lambda, Cloud Formation
- Devised a vulnerability security operation automation workflow by developing python-based serverless APIs deployed on AWS integrated with enterprise ServiceNow and generate automated email alerts
- Developed a proof of concept by creating security controls compliance infrastructure on AWS with cloud formation templates, Lambda functions, Linux bash scripts and ELK stack to create visualization dashboards and received an applause award

PROJECTS

Recommendation system | *Spark, Python, sklearn, numpy, xgboost, pandas* Los Angeles, CA
University of Southern California Mar 2022-May 2022

- Built hybrid recommendation system with item based and model-based recommendations using Spark in Python
- Conducted feature selection and data preprocessing utilizing scikit-learn library to implement regression with XGBoost
- Recorded an RMSE value of 0.977 on yelp reviews dataset of 6 million records with a 60-20-20 train-validation-test split

Sentiment Analysis with Transformers | *Python, numpy, PyTorch, matplotlib* Los Angeles, CA
University of Southern California Mar 2022-Mar 2022

- Constructed Transformer blocks for BERT model to pre-train and fine-tune a model for sentiment analysis
- Attained 90% validation accuracy on IMDB reviews dataset with 25k training and 25k test examples

Self-supervised detection of spine anomalies | *PyTorch, Python, numpy, matplotlib* Los Angeles, CA
University of Southern California Jan 2022-May 2022

- Implemented novel self-supervised learning methods on spine X-ray images for classification
- Developed custom Contrastive Learning modules using PyTorch to improve baseline performance
- Achieved an AUROC of 0.85 on Vindr-SpineXR dataset of 8,389 training and 2,077 images for testing

LEADERSHIP AND INVOLVEMENT

Vice President Hyderabad, India
Street Cause Aug 2015-May 2017

- Charged with co-organizing donation drives, fundraisers, handling budget, and logistics for more than 10 events to impact lives of more than 200 underprivileged as part of organization events

TECHNICAL SKILLS

- Programming languages:** Python, Java, PySpark, SQL
- Software and Frameworks:** Tensorflow, Keras, Git, Docker, Jupyter notebooks, PyTorch
- Databases:** DynamoDB, MongoDB, MySQL, Postgres, Oracle, MariaDB
- Platforms:** AWS, Oracle and Google cloud platforms, Postman, Elasticsearch, Logstash, Kibana
- Operating Systems:** Windows, Linux, Mac OS X
- Skills:** Clustering, Logistic regression, KNN, KMeans, RNN