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Seasoned AI scientist with nearly 5 years of domain experience through research and professional experience

Proven credentials in deep learning, computer vision, machine learning and, natural language processing by developing and delivering complex business solutions

PROFESSIONAL EXPERIENCE

New York Life Insurance (June 2018 – Current)

Senior Associate, Data Science

- Construct data pipelines, implement API's, develop model deployment frameworks and introduce latest cutting edge tools/software's to establish deep learning and machine learning intelligence to the systems
- Successfully designed and implemented a AI process for cleaning the unstructured beneficiary records using Natural Language processing and computer vision techniques and saved **2million$** vendor cost
- Active Projects: **Agent Compliance** and **Income Prediction** models

Regions Bank – Birmingham, AL (Nov 2016 –May 2018)

Data Scientist, AI

- Reporting to the CDO of the bank, responsible for developing augmented intelligence applications to help the bank in process improvement and for finding new opportunities
- As a team, orchestrated a big data and GPU ecosystem with Nvidia P100 and decreased the process time of fraud detection algorithm from **9 hours to 35 seconds** using Tensorflow and Keras
- Used OpenCV, Keras and High-performance environment to train a **VGG16 model** to identify checkboxes and scrape the written information from **PDF's and TiFF Images**
- Acted as lead role for the project; POCO (Probability of Charge-off) for an overdraft account, and replaced the old model with the new model with **4% increase in accuracy**.

Big Data Analytics and Research Lab, AL (Jan 2016 – Oct 2016)

Intern, Big Data & AI

- Deployed a **5 node Hadoop cluster** with all the big data daemons like Spark, Hive, Pig, Avro, YARN and Sqoop with 60 Cores, 160 GB ECC Ram and 25TB of storage
- Developed a "Click Through Rate Prediction Model" (2014 Kaggle competition model) for calculating the click probability of the user using Logistic Regression (L2 Regularization) with Spark ML pipeline (3 stages)

  * Final Test Accuracy: 0.86 * ROC AUC: 0.88

EDUCATION

University of Alabama at Birmingham (Aug 2015 – April 2017)

Master's in Electrical and Computer Engineering (Data Science Concentration) (G.P.A: 4.0)

Research Fields: Deep Learning, Computer Vision, Natural Language Process and High Performance Computing

Thesis Title: Framework for Social Network Sentiment Analysis Using Big Data Analytics

- Developed a generalized framework for performing social network sentiment analysis on any kind of domain such as automobile, banking and telecom
- Studied numerous research papers on natural language processing, big data analytics and machine learning

  Case Study: Automobile Industry, Results: Highest Sentiment: Mercedes (0.87), Lowest Sentiment: Buick(0.49)

Publication: ***Big Data and Visual Analytics, Springer 2017, Chapter 12***

Training and Certifications:

- Deep Learning Specialization (Andrew Ng, Coursera)
- IBM NVIDIA Deep Learning for Finance and Insurance Industries
- Distributed Machine Learning with Apache Spark (UC Berkeley, edX)

TECHNICAL SKILLS

Programming: Python (scikit-learn, pandas, numpy, scipy, gensim, tensorflow, NLTK), R, SQL, C, C#, JAVA

Data Tools: Spark, Hadoop, Alteryx, Jupyter Notebook, Anaconda, Data Robot, Excel, MATLAB, Octave

Databases: MySQL, NoSQL (MongoDB), Hive, Oracle

Data Visualization: Tableau, QlikSense, Plotly, Matplotlib, Seaborn, Bokeh

Other: A/B testing, ETL, Rest API's, Cloud Computing(Azure, AWS), Version Control(Git), 3D Graphics, Linux

ADDITIONAL RESEARCH AND EXPERIENCE

University of Alabama at Birmingham - Birmingham, AL (Aug 2015 – April 2017)
Research Assistant

Bharat Sanchar Nigam Limited (B.S.N.L.) - Visakhapatnam, India (Feb 2013 – April 2015)
Tele Communications Trainee

Defense Research Development Organization (D.R.D.O.) - Hyderabad, India (Dec 2014 – Jan 2015)
Technical Intern

*OTHER RELATED MENTION*S:

- Developer of the python library '**zeppi-convert**', which converts zeppelin notebooks to python
- Co-authoring the book **Practical computer vision with Keras**
- Part of the lab, which won Home Land Security Passenger Screening Competition (1M$ prize, Kaggle 2017)
- Highly Recognized Projects:
    - Real Time Sign Language & Facial Boundaries Detection (https://github.com/kbsriharsha/SignDetect-Face) (**100k LinkedIn video views**); identifies the facial boundaries of a person from the webcam and displaying a particular facial boundary depending on his selection (Model: TransferLearning; Mobilenet)
    - Facial Emotion Analysis (https://github.com/kbsriharsha/FacialEmotionAnalysis); helps in identifying the facial emotions of a person in real-time. **Training time was cut short from 48 hours to 45 minutes by using Tesla 80 GPU's in GCP**
- Awards & Accomplishments:
    - As a team (team lead), **secured first place at South Indian Robotics competition 2014**, for developing an intelligent line follower, which was able to finish the given maze in 24secs (2000+ participants, from all over country)
    - Received Merit Scholarship from Central Government of India for 3 consecutive years (2012-2014, graduate level) for placing in top 10 positions at state level based on GPA
    - Recipient of **Gold Medal** for district (county) first at high school senior level, 2011