Contact

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Top Skills

Machine Learning
Data Science
Statistics

Languages

English, Hindi

Certifications

Microsoft Bot Framework
Google Dialogflow
Machine Learning using Python
Building chatbot in Python

Honors-Awards

Silver Medalist - Electronics & Telecommunication Department

Einstein Award

Best Startup Award IET UK 2011 SPOT AWARD for Best Performance Tranformer of the Month- August 2018

Publications

THE SUPERMAN ALGORITHM: LOGISTIC REGRESSION

Autonomous Intelligence Driving with Computer Vision

A guide to develop Al Powered Chatbots

NLP – A BOON FOR BUSINESS INTELLIGENCE

Sumit Ranjan

Data Scientist @ VMware | Al Researcher | Author | Speaker Bengaluru

Summary

Passionate and motivated data scientist, experience in building applied Machine learning and Deep learning solutions to meet real-world needs.

Expertise in modeling complex problems, discovering insights, and identifying opportunities through the use of statistical, machine learning, algorithmic, mining and visualization techniques.

Silver Medalist in Bachelor of Technology (Electronics & Telecommunication).

Got Rank- 61 in Microsoft Al Challenge 2018.

Awarded "Autonomous Self- Driving car Engineer" scholarship by Udacity. This Nanodegree helped me to start working on real time Self- Driving Car problems.

My interest includes: Machine Learning, Convolution Neural Networks (CNN), Image Processing, Computer Vision, Deep Learning, Natural Language processing, RNN, LSTM and chatbots.

I have worked on following:

- ► Machine Learning, (Supervised, Unsupervised, Exploratory Data Analysis)
- ► Deep Learning (Computer Vision, CNN, RNN, LSTM)
- ► Natural Language Procession (Sentiment Analysis, NLTK, Word2Vec, TF-IDF)
- ► Statistics, Probabilistic, Calculus, Algebra, Algorithms
- ► Expert (Python, C++)
- ► Agile software development (SCRUM)
- ► Machine Learning/Deep Learning pipelines/tools: TensorFlow, Keras, pytorch, sk-learn, Python, Numpy, Scipy, OpenCV, Caffe, matplotlib, Pandas, seaborn,

- ► Transfer Learning Architecture : ResNet34, ResNet50, ResNet101, ResNext, RNet
- ► CNN Techniques : Semantic Segmentation, Augmentation, Visual Attention

Github Link: https://github.com/ranjan-sumit

Experience

VMware
Data Scientist
March 2019 - Present (1 year 6 months)

Bengaluru Area, India

VMware, Inc. is a publicly traded software company listed on the NYSE under stock ticker VMW. Dell Technologies is a majority share holder. VMware provides cloud computing and virtualization software and services. It was one of the first commercially successful companies to virtualize the x86 architecture.

Roles and Responsibilities:

- ► Work is related to Al Application development, Machine learning and Natural language processing.
- ► Leading SEO Analytics project at VMware.
- ► I work for the data science and advance analytics team of Global Service Support(GSS) at VMware.
- ► Working on various cutting-edge natural language processing problem using BERT, NLTK, SPACY, PyTorch, Keras.
- ► Leveraging Unstructured Information for Google Search query data using Natural language processing.

► Developed a python package for SEO Analytics which helps to analyze google search console data

Packt

Author at Packt - "Applied Deep Learning and Computer Vision for Self-Driving Cars"

February 2019 - August 2020 (1 year 7 months)

Birmingham, United Kingdom

This book offers practical Knowledge and techniques needed to learn to get into field of Self-Driving Cars. It will introduce various Deep Learning and Computer Vision concepts from scratch and apply them to the real-world practical Self-Driving Cars problems using realistic examples. This book will also teach to implement powerful and robust Deep Learning networks using Computer vision with Python libraries like Tensorflow and Keras.

This book is perfect for anyone who is delving into the Self-Driving car space. But this is also a good book for those who wants to become Computer Vison experts by applying various OpenCV and Deep Learning techniques in real – world problem

Affine Analytics
Data Scientist
June 2018 - March 2019 (10 months)
Bengaluru Area, India

Affine Analytics is a provider of high-end analytics services to solve complex business problems. Affine has approximately 350 people across New York, United States and Bengaluru, IndiaAffine Analytics is a strategic analytics partner to Fortune 500 companies. It has been cited by Gartner as "Specialist Mid-Sized Vendor in Advanced Analytics and Machine Learning". The firm provides services in the area of Predictive Analytics, Artificial Intelligence, Big Data and Machine Learning. Affine focuses on verticals like Retail, CPG, Ecommerce, Banking and Financial Services, Technology.

Roles and Responsibilities:

► Work is related in implementing Al Application development, Machine learning & business consulting.

- ► Currently a core member of the Artificial Intellegence-COE Team at Affine Analytics
- ► Working on various cutting-edge image processing problem using OpenCV, transfer learning, fastai, pytorch, keras, tensorflow etc
- ► Leveraging Unstructured Information for insurance client to Calculate Sentiment Index using various NLP/ RNN techniques
- ► Development of a chatbot for Mall using Dialogflow, python and flask
- ► Working on various Self- Driving Car used cases using openCV, tensorflow, keras etc

KPIT

Software Consultant March 2017 - June 2018 (1 year 4 months) Bengaluru Area, India

KPIT provides product engineering and IT consulting solutions and services to its clients. The Product Engineering line of business encompasses solutions and services to create automotive products by impacting the sub-systems of a vehicle including powertrain, body electronics, chassis, diagnostics, telematics, hybrid/electric powertrain as well as infotainment. KPIT's Intelligent Transport System (ITS) is the first ARAI-certified JNNURM II compliant On-Bus ITS solution.

Roles and Responsibilities as data scientist:

- Developed a model for sentiment analysis of the product review.
- ► Worked on development of Ticket Bot POC used Python, flask, dialogflow
- ► Worked on UP- Sell and Cross-sell problem
- ► Worked on UP- Sell and Cross-sell problem, various supervised and unsupervised technique used to solve this problem

► Worked as the application data integration lead engineer. Responsible for end to end integration and quality analysis of the product.

Lam Research
Software Consultant
July 2014 - December 2016 (2 years 6 months)
Bengaluru Area, India

Lam Research Corporation is an American corporation that engages in the design, manufacture, marketing, and service of semiconductor processing equipment used in the fabrication of integrated circuits. It's products are used primarily in front-end wafer processing, which involves the steps that create the active components of semiconductor devices (transistors, capacitors) and their wiring (interconnects). The company also builds equipment for back-end wafer-level packaging (WLP), and for related manufacturing markets such as for microelectromechanical systems (MEMS).

Roles and Responsibilities:

- ► Extensively involved in Throughput Analysis and Performance Analysis using Semiconductor tool data.
- Extensively involved in Data wrangling activities.
- Data analyst for an Application for client Lam Research.
- ► Responsible for testing if the ML algorithms are working fine, before deployment across releases for various customers like INTEL, SAMSUNG, TSMC, Global Foundries, etc. Responsible for Data wrangling and visualizing insights from the data.

Education

Massachusetts Institute of Technology
MIT Professional Education: "Machine Learning - From Data to
Decisions", Machine Learning · (2020 - 2020)

KPIT | Udacity

Self-Driving Car Engineering, Computer Vision · (2018 - 2019)

Dr MGR Educational and Research Institute

B.TECH, ELECTRONIC & TELECOMMUNICATION · (2008 - 2012)