AKASH MALHOTRA

Master's Student @ CentraleSupélec

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EDUCATION

CentraleSupélec
Masters in Big Data Management and Analytics

📅 September 2020 – Ongoing   ● Ile de France, France

- Specialisation in Decision Support Systems.
- Previous Semesters in UPC (Barcelona) and ULB (Brussels).
- Learnt Databases, Big Data tools, Graphs, Cloud, ML, RL, DL, and more.

City University of Hong Kong
Bachelors in Electronic and Communication Engineering

📅 September 2014 - June 2018   ● Hong Kong

- Graduated with First Class Honors (GPA 3.65).
- Summer Exchange to University of Sunderland, UK 2015.
- Attended Bootcamp at Standford University in September 2015 to learn about startups.
- Semester long exchange to University of British Columbia, Vancouver in 2017.

WORK EXPERIENCE

Data Science Intern
Amadeus

📅 March 2021 - Ongoing   ● Nice, France

- Hotel Reviews data collection by web-crawling.
- Exploratory Data Analysis on Hotel Reviews including unsupervised techniques like Topic Modelling, and Clustering.
- Aspect based sentiment analysis using deep learning techniques like transformers.

Research Assistant
Hong Kong University of Polytechnic

📅 September 2018 - August 2019   ● Hong Kong

- Classification on data generated by IMU sensors using Machine Learning Techniques like SVM and Boosted Trees.
- Prediction of various Bio-mechanical quantities using deep learning.

Summer Research Intern
University of Buffalo

📅 June 2017 - August 2017   ● Buffalo, US

- Worked on Biomedical Imaging and free hand ultrasound.

PUBLICATIONS

Co-Author, Classification of Runners' Performance Levels with Concurrent Prediction of Biomechanical Parameters using Data from Inertial Measurement Units in *Journal of Biomechanics*

Designed a classifier and preliminary Neural Network Model for Predicting Running Parameters

📅 Accepted

Co-Author, Trans-illumination Intestine Projection imaging of intestinal motility in mice" in *Nature*

Built a mouse tracking system using computer vision for intestine imaging

📅 Accepted

SKILLS

Critical Thinking   Cloud Computing   Distributed Computing   Machine Learning   Deep Learning   NLP   Graphs   Databases   Exploratory Data Analysis   Data visualisation   Reinforcement Learning

TECHNOLOGIES

Python   Pandas   PyTorch   AWS   Spark   Hadoop   Neo4j   sklearn   Java   Scala   GraphX   Git   DVC   MLflow   Gensim   Scrapy

HONORS

Erasmus Mundus Scholarship Awardee
BDMA Scholarship Homepage

Winner Hong Kong Techathon 2018
HK Techathon Homepage

📅 Co-founder of CariCard start-up team

RECENT PROJECTS

Domain Specific OCR system
Link to Presentation

🗄 Link to OCR Pipeline Colab   📍 Link to BERT Training Colab

- Paragraph Detection using PublayNet: Bounded Box CNN
- PostOCR text correction including, multi-stage general and domain specific correction check using edit distance and BERT.

AutoDL: Neural Architecture Search using NASBench
 akashjorss/NAS_Search_using_NASBench-101

- Compared performance for different search algorithms.
- Insights on CNNs architectures sampled from NASBench-101.

Infectious disease simulation using AWS Cloud Services
 akashjorss/Infectious_disease_simulation_using_AWS

- Used serverless architecture of AWS to run simulation for covid using elastic MR.
- Visualization using Elastic Kibana.

Twitter Sentiment Analysis using Graphs (Neo4j)
 akashjorss/Twitter_Sentiment_Analysis_Using_Neo4j

- Lambda architecture for data loading Twitter to Neo4j and MongoDB.
- Tweet level sentiment Analysis using textblob.
- Aggregate Sentiment Analysis on Companies using Label Propagation on Graphs.

Dashboard for visualizing Global Health Infrastructure
Link to the dashboarrd

- Used JavaScript Charts.js to create a dashboard.

International Scholarship Awardee
🗄 Fully funded studies at City University of Hong Kong

LANGUAGES

English   ●●●●●

French   ●●●○○

Hindi   ●●●●●