Pankaj Chejara

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EDUCATION

MASTERS, COMPUTER ENG.
Malviya National Institute of Technology
June 2012 | Jaipur, India

MASTERS, COMPUTER APP.
Rajasthan Technical University
June 2010 | Kota, India

BACHELOR, MATHEMATICS
University of Rajasthan
May 2007 | Jaipur, India

LINKS

Github:// **pankaj**
LinkedIn:// **pankajchejara**
Website:// **pankajchejara**

SKILLS

PROGRAMMING
Python and iPython Notebook
R
SQL
JavaScript, HTML, and CSS

MACHINE LEARNING
Regression
Support Vector Machines
Naive Bayes
K-Nearest Neighbors
Random Forests
Decision Trees
Neural Networks
Cluster Analyses
Natural Language Processing

LIBRARIES
Pandas, Matplotlib
Seaborn, Numpy
PyTorch, NLTK
Spacy
Plotly

EXPERIENCE

DATA ANALYST/DEVELOPER | Tallinn University
Sep 2019 – Till date | Tallinn, Estonia

- Managed the **gathering**, **cleaning**, and **pre-processing** of audio-video and log data from students' learning activities
- Generated data visualizing dashboard for the use of teachers
- **Analyzed multivariate clusters** of facial expressions, head movement, and lip movement factors using K-Means algorithm
- Developed **prediction models** for students' learning behavior using supervised machine learning algorithms
- Performed **statistical analysis (correlation, t-test, anova)** on multimodal data features and identified indicators for group work
- Data application development
  - Led **product development** of a students' activities monitoring application, and developed web-based version of a Hardware prototype (Raspberry Pi) to capture and analyze audio, video, log from group's meeting
  - Handled **front-end and back-end development** responsibilities using Python's Django, Bootstrap, SQL, JQuery, and Google Speech-to-Text API
  - Integrated a real-time dashboard to visualize the group dynamics based on speaking participation and speech-to-text data
  - Performed **usability testing** with different stakeholders, including teachers, researchers, students, to understand perceived ease-of-use and usefulness of a collaboration quality monitoring system
- Map-based data visualization application development
  - Development of a map-based application featuring interactive visualization for the Portugal region. This innovative tool empowers users to explore diverse energy generation scenarios and their impact on climate
  - Managed **front-end and back-end development** responsibilities using Python's Django, Bootstrap, Java script and Plotly

RESEARCHER | Indian Institute of Information Technology and Management
Aug 2016 – June 2018 | Gwalior, India

- Analysed **different community detection algorithms** on social-network datasets
- Proposed **a machine learning based approach** to predict information diffusion phenomenon in social networks.
- Developed a plugin to routinely capture user's self-reported emotional state measures during learning activities
- Video watching behavior application development
  - Development of a **module for Moodle LMS** to capture video watching behaviors of students using YouTube API