

Pankaj Chejara

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Links

Website:// [pankaj chejara](#)
Github:// [pankajchejara23](#)
LinkedIn:// [pankaj-chejara](#)
GoogleScholar: // [pankaj chejara](#)

Skills

LANGUAGES

Python, R

LIBRARIES

Scikit-learn, Pandas, Numpy, Matplotlib,
Keras

DATABASES

MySQL

STATISTICS

Descriptive, inferential

OTHERS

Markdown, Git, Vim,
Etherpad, Multimodal data analysis

Concepts

Statistics

Data structures

Algorithm

Machine learning

Discrete mathematics

Operating systems

MySQL

Data science

Education

MASTER IN TECHNOLOGY

MNIT, Jaipur, India

2007-2012

MASTER IN COMP. APPLICATIONS

RTU, Kota, India

2004-2007

BACHELOR IN MATHEMATICS

Rajasthan University, Jaipur, India

Experience

2019-2023 Tallinn University

Data Researcher

Performing data analysis on variety of traces collected from classrooms (e.g., video, logs). I have used variety of machine learning methods ranging from dimensionality reduction (t-SNE), clustering (K-means) to supervised machine learning (e.g., Random Forest, Decision Tree) to model students' learning behavior. Besides, I have also been building interactive data intensive web applications as part of my job's responsibilities.

Python, Django, Scikit-Learn, Numpy, Pandas, Plotly, Leaflet, Scipy, Matplotlib, Seaborn, Git, Linux

Certifications

Data Analysis with Python

IBM, Coursera, 2020

Data Visualization with Python

IBM, Coursera, 2020

Neural Network and Deep Learning

deeplearning.ai, Coursera, 2018

Improving Deep Neural Network: Hyperparameter tuning, Regularization and Optimization.

deeplearning.ai, Coursera, 2018

Data Science Projects

Speaking participation detection

Raspberry Pi

A hardware prototype to detect active speaker based on Voice Activity Detection and sound's Direction of Arrival.

[Source code](#) | [Demo](#)

Collaboration monitoring app

Speech analytics

A web-application utilizing Google Speech-to-text and voice activity detection to visualize speaking participation in a group activity.

[Source code](#) | [Demo](#)

Predicting collaboration quality Visualization, Supervised Machine Learning

Exploratory analysis of features from audio, video and log data (e.g., speaking time, turn-taking, head movement) to identify different collaboration behavior. Building predictive models for collaboration quality and assessing those models across different schools in Estonia.

[Publication](#)

Seeds

Map visualization

An interactive web application allowing users to build energy scenarios for Portugal region. Users can tweak a number of parameters (e.g., solar energy, wind energy) which filters scenarios and shows various visualizations.

[Website](#)

TrustUX

Visualization

A research-based interactive web application which allows users to create questionnaire to assess trust aspect of their technology.

[Website](#)