Empathy map

Weather Classification using Deep Learning

Cloudy

Sunny

Rainy

Foggy

Sun rise

WEATHER CLASSIFICATION USING DEEP LEARNING

SAYS

Complex weather patterns difficult to classify.

Stakeholders require a reliable weather classification system.

Unpredictable weather can have a significant impact on crops

We need to find ways to minimize the impact of human error.

THINKS

How can I better communicate complex weather data to the public?

Can this deep learning model reliably predict extreme weather events ?

Optimizing and hyperparameters is crucial to improve performance of model

Access to a robust dataset is crucial for training reliable and adaptable model

FEELS

Users feel frustration with inaccurate forecasts.

Anxious about the potential impact of unexpected weather events.

Enthusiastic about pushing the boundaries of deep learning for weather classification.

Users feel Continuous refinement of models is necessary for reliable predictions

PAINS AND GAINS

PAINS
What are their fears, frustrations, and anxieties?

Preprocessing weather data can be time-consuming and require domain-specific knowledge.

Handling missing data, outliers, and different data formats can be difficult.

Weather conditions can vary widely based on location and time, which can lead to significant variability in the data.

Increased energy costs and weather-related damage.

GAINS
What are their wants, needs, hopes, and dreams?

Confidence in Planning

Efficiency and Time Savings

Enjoyment of Outdoors

Safety and Well-being.

DOES

Conducts research for selecting suitable pre-trained models and transfer learning techniques.

Collaborates with mentors on deep learning weather classification model to improve them.

Dedicates time to model training and experimentation with hyperparameters.

Analyzes historical weather data and uses forecasts for planning purposes.