

Narrative Analysis

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CSCE585

Motivation

- Currently, access to mental health resources and the time required for diagnoses are barriers to mental health resources
- Most people suffering from mental health issues will not receive help
- A clinical real time emotional analysis tool would help improve access and diagnostic times within the industry
- Past iterations of this tool are limited in their training due to the privacy required when handling health data

Federated Learning

- Train local AI models
- Use local AI models to train one central AI model
- Keep data localized without sharing to central model

Goals

- Implement a federated learning system to an emotional analysis tool
- Determine the model convergence of a textual analysis language model using FL techniques

Methodology

- Flower framework
- Federated networks with 10 nodes
- Run test 3 times
- Check model convergence

Results

- Unfortunately unable to acquire any results
- Based on experiment setup, expected results would lean towards model convergence

Conclusion

- Problem
- Federated Learning
- Methodology
- Results