

Efe Tuna Can – LOGBOOK

Week of 2024-10-07 – 2024-10-13

- Literature review on fake news detection.
- Research on already trained models.

Week of 2024-10-21 – 2024-10-28

- Identification of the latest models for testing on Papers with Code.

Week of 2024-11-13 – 2024-11-19

- Conducted initial project alignment meeting with TA.
- Integrated siamese-BERT approach for fake-news detection using LIAR dataset.

Week of 2024-11-20 – 2024-11-26

- Evaluated GNN-FakeNews model performance from Safe-Graph GitHub repository against baseline methods.
- Tested the pretrained models on our use case. For real-time reliability detection.

Week of 2024-11-26 – 2024-12-02

- Finish exploratory analysis and baseline models on Kaggle

Week of 2024-12-11 – 2024-12-17

- Executed inference tests:
 - BERT + GraphSAGE model on PolitiFact dataset
 - BERT + GAT model on GossipCop dataset
- Integrated experiment tracking using Weights & Biases
- Selected best-performing models based on evaluation results and metrics
- Began preparations for AWS cloud deployment setup
- Scheduled follow-up discussions with TA
- Made multiple commits related to inference updates, model organization, and requirement file management.

Week of 2024-12-18 – 2024-12-24

- Initiated exploratory data analysis and baseline modeling in Kaggle notebooks focusing on neural networks, bag-of-words, and logistic classifiers
- Committed inference updates and fixes to requirements.txt.

Week of 2025-01-01 – 2025-01-07

- Tested AWS SageMaker deployment
- Switched from SageMaker to EC2.
- Completed AWS environment setup and model deployment

Week of 2025-01-08 – 2025-01-15

- Due to bottleneck and compatibility issues switched from AWS EC2 to Google Cloud Run.

Week of 2025-01-29 – 2025-02-04

- Started defining and outlining Retrieval-Augmented Generation (RAG) pipeline architecture with a minimum confidence threshold of 80%.

Week of 2025-02-08 – 2025-02-14

- After experimentation, decided to not pursue RAG based reliability scoring.

Week of 2025-04-21 – 2025-04-27

- Configured Docker containers and Gunicorn for deployment.
- Updated project dependencies via new requirements.txt.

Week of 2025-04-27 – 2025-05-02

- Updated the subjectivity model inference for title inference.