Weekly Progress Report - 3

Name of the Student 1	Hetanshi Bhatt
Roll Number of Student 1	22BPC156
Name of the Student 2	Kunal Solanki
Roll Number of Student 2	22BCP131
Project Title	Combating Digital Misinformation: Deepfake Detection Using Deep Neural Networks
Name of the Supervisor (Mentor) at PDEU	Dr. Samir Patel
Week Number	Week 3

Progress made in Week:

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This week, we focused on improving dataset handling, frame extraction, and strengthening our understanding of version control for large-scale datasets:

- **Google Colab Setup for Processing**: Shifted frame extraction tasks to Google Colab to leverage GPU acceleration for faster processing.
- **In-depth Learning of DVC**: Explored Data Version Control (DVC) concepts in detail, gaining a deeper understanding of efficient dataset tracking and management.
- **Remote Configuration**: Configured Google Drive as a DVC remote using OAuth services and a Google Service Account, enabling smooth dataset pushes and pulls.
- **Batch & Multi-core Processing**: Implemented multi-core and batch processing methods, ensuring effective handling of large-scale tasks such as dataset pulling and frame extraction.
- **Frame Extraction Enhancement**: Executed the frame extraction pipeline on all dataset videos, extracting **200 frames per video** for richer training input.
- **Dataset Versioning**: Successfully pushed the newly processed dataset (with extracted frames) to the DVC remote for reproducibility and collaboration.

Hetanshi Bhatt	Kunal Solanki	Samir Patel
Hetanshi	*tunal*	
Name and Signature of Student 1	**Name and Signature of Student 2**	**Name and Signature of Supervisor (Mentor)**

BTech Minor Project Policy

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