Practical Machine Learning: Statement of Contribution

Oguzhan Cesur:

Adjusted bounding box and landmark coordinates, refining the accuracy of object detection and landmark regression.
Developed the LandmarkRegressionNet and its corresponding dataset/dataloader, strengthening the accuracy of hand landmarks identification.
Assisted in renaming images and 'image_name' keys, maintaining data consistency.
Identified and secured a suitable hand dataset for model training.
Prepared the presentation slides, encapsulating all aspects of the project.

Ozan Ilgin Tanriverdi:

Conducted preliminary testing with smaller data subsets, ensuring model functionality before full-scale training.
Developed the LandmarkRegressionNet and its corresponding dataset/dataloader, strengthening the accuracy of hand landmarks identification.
Developed the GestureClassifier and its associated dataset/dataloader, pivotal in recognizing hand gestures.
Trained individual models with the pre-processed data, instrumental in fine-tuning the performance of each model.
Assisted in renaming images and 'image_name' keys, maintaining data consistency.

Sarp Cagin Erdogan:

Identified and secured a suitable hand dataset for model training.
Develepod the flask webapp and integrated the tetris game combined with the real time ml prediction system.
Conducted preliminary testing with smaller data subsets, ensuring model functionality before full-scale training.
Developed the GestureClassifier and its associated dataset/dataloader, pivotal in recognizing hand gestures.
Tested models with real-time webcam input, verifying the system's live performance and reliability.

Turker Han:

Trained individual models with the pre-processed data, instrumental in fine-tuning the performance of each model.
Ensured data integrity by uniquely renaming images and corresponding keys in JSON files, preventing duplication.
Enhanced the dataset through mirroring and rotating one class of images, improving model generalizability.
Managed the merging of images and annotations into one directory, facilitating efficient data management.
Recorded the video for the project presentation, effectively demonstrating the system's capabilities.