

Individual Contribution Statement

Yingchen Guan

In this project, the main parts I completed are:

1. overall project planning and design
2. neural network training
3. Google cloud server construction
4. software development (running on cloud program) development
5. Communication and coordination with sponsor.

All the above parts (except communication with sponsor) are all done independently for myself, and there is no part to cooperate with others.

1. overall project planning and design: The sponsor only provides the demand, and I give the design plan to meet the customer's needs.
2. neural network training: From choosing, to building, training, and finally adjusting convolutional neural networks.
3. Google cloud server construction: Purchase and configure Linux 9 server, configure python and TensorFlow operating environment, set firewall and SSH access key, establish hardware and GUI connection with server.
4. software development (running on cloud program) development: The core functions of the cloud service include obtaining uploaded images, using the trained CNN to analyze the images, statistics, output, sorting, storing and sending the analysis results.
5. Communication and coordination with sponsor: Update the progress with the sponsor in time, ask for comments and needs, and improve the design.