

Budget for MSc Individual Project

Project Title: PROJ00114PG Bayesian Deep Learning in Marine Environment Segmentation

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Requested Budget Amount: £109 (¥1000)

Reason for Budget Request:

This budget request is to support a machine learning project that requires substantial computational power. My current computer is insufficient for the demands of the project, leading us to rent an NVIDIA GeForce RTX 4090D graphics card from the computing platform *AutoDL* in China. This option is more cost-effective compared to using *Google Colab*.

Cost Comparison:

- **AutoDL:** Renting a 4090D graphics card on the platform costs approximately £1.30 (¥12) for 6 hours of operation while running the testing programme, at a rate of ¥1.98 per hour.
- **Google Colab:** Running the same programme on *Google Colab* requires 500 compute units, which costs approximately £45.90 under the "pay-as-you-go" model.

Detailed Budget Plan:

Total Budget: High-Performance Server Rental: £109 (¥ 1000)

Budget Utilization Plan:

The requested budget will be used to rent the NVIDIA GeForce RTX 4090D graphics card from the selected platform *AutoDL*. The cost for renting one card is approximately £0.216 (¥1.98) for every hour usage. This is substantially lower than the cost of using *Google Colab*. Currently, approximately £54.52 (¥500) has been spent on GPU rental, and future usage is anticipated to be similar. Therefore, a budget of £109 (¥ 1000) is requested to cover ongoing computational needs.

Expected Outcomes:

By utilizing the high-performance 4090D graphics card, the project will benefit from faster processing times and cost savings compared to other cloud computing services. This approach will enhance the efficiency and effectiveness of our machine learning tasks, leading to faster model training speed.

Approval Signatures:

- **Project Supervisor:**

Guanchang Liu