**Assignment 1. AIGC-QA: AI Generated Content Quality Assessment**

**In recent years, artificial intelligence generated content (AIGC) has grown rapidly, among which with the development of text-to-image technology, artificial intelligence-based image generation has been applied in various fields. However, artificial intelligence generated images (AIGI) may have some unique distortions compared to natural images, making many generated images unsuitable for practical applications. Therefore, it is of great significance to study subjective and objective image quality assessment (IQA) methods for AIGI. To better understand human visual preferences for AIGI, researchers have established AIGC's large-scale IQA databases named AGIQA-3K and AIGCIQA2023. Generate multiple images based on state-of-the-art text-to-image generation models by using the same prompt words. Based on these images, the researchers conducted well-organized subjective experiments to evaluate human visual preference for each image from multiple perspectives such as** **quality, authenticity, and** **text-image correspondence. Data analysis presents differences across models and datasets, and benchmark experiments evaluate the performance of state-of-the-art IQA metrics on the databases.**

In this assignment, you should:

1. **Design a IQA model on the datasets.**
2. **Validate the proposed model on the test dataset (SRCC, PLCC).**
3. **Write a report in IEEE Journal format. The report should include title, abstract, the implementation details of your models, the experimental setup and the experimental results, and some analyses, etc.**

Finally, you should send the report, the model (including the readme file), and the results on the test dataset to hanjinliang@sjtu.edu.cn. The email title should be written as: Assignment1 + Name + StudentNumber

The link to the AGIQA-3K database:

<https://github.com/lcysyzxdxc/AGIQA-3k-Database>

The link to the AIGCIQA2023 database:

<https://github.com/wangjiarui153/AIGCIQA2023>

Reference:

1. Li, Chunyi, et al. "AGIQA-3K: An Open Database for AI-Generated Image Quality Assessment." arXiv preprint arXiv:2306.04717 (2023).

2. Wang, Jiarui, et al. "AIGCIQA2023: A Large-scale Image Quality Assessment Database for AI Generated Images: from the Perspectives of Quality, Authenticity and Correspondence." arXiv preprint arXiv:2307.00211 (2023).