Excellent Students Wanted

Are you an exceptional student looking for a Machine Learning project? Interested in computer vision, adversarial examples, or proof-of-personhood? Looking for a thesis, but you want to work on your own ideas? Reach out and we will find a project for you!

A nonexhaustive list of possible topics:

1. Generating modern puzzle or vision CAPTCHAs

2. Understanding adversarial examples and their transferability

3. How does the data distribution impact adversarial examples and conclusions

4. Solving challenges from hCAPTCHA

5. Evaluating the robustness of quantized/LoRA large language or vision models

6. Applying FFF to speed up vision models

7. How should we handle old gradient information?

8. Using event-based cameras for low-latency inference

These topics have a heavy research focus with the goal of publishing results at a top-tier conference, so it is required that you are a student with exceptional academic performance and have strong motivation. You are intended to lead the project, so you should also expect that the time investment will be high.

Requirements: Very strong programming skills (Python, C / C++, etc.) and a good knowledge of machine learning. Previous experience working with RL is an advantage.
We will have weekly meetings to address questions together, discuss progress, and think about future ideas. And we will be in regular contact to resolve technical problems.

Contact

In a few sentences, please explain why you are interested in the project and about your coding and machine learning background (i.e., your own projects or relevant courses).

And if you already have an idea/topic in mind then please write a bit about it.

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