Internship Title:
Deep-learning for efficient mobile gaming systems

About Huawei Nice Research Center:
HUAWEI is a leading global provider of information and communications technology (ICT), driving Innovation & Consumer Experiences in Smart Device, Infrastructure, and network solutions.

Huawei Nice Research Center is located in the Sophia Antipolis Technology Park (10 minutes from Cannes, France). Among other missions. the team in Sophia Antipolis innovates in the field of 3D graphics rendering systems for gaming use cases on high-end smartphones.

Internship Summary:
Premium mobile phones embed high-performance processing hardware: 3D Graphics Processing Unit (GPU) as well as Neural Processing Unit (NPU) supporting deep-learning inference algorithms. The internship goals are to :
- Survey existing deep-learning image super resolution algorithms and select the most suitable one for improving mobile gaming system rendering efficiency.
- Create a performance evaluation framework and analyze the resulting performance in terms of visual quality and complexity of mobile system processing.
- Identify bottlenecks and propose improvements to the selected algorithm.

Internship Duration:
6 months.

Position Qualifications:
- Last year Master degree student in Electronics/Computer Science.
- Written and spoken English.
- Programming skills in C, C++, Python, and machine learning framework.
- Familiarity with 3D Graphics programing APIs is a plus.

Application procedure:
To apply for this position, please email your application in English to Karim Djafarian (karim.djafarian@huawei.com).

Key Words:
GPU, 3D graphics, Vulkan, DirectX, OpenGL(ES), Machine Learning, TensorFlow, PyTorch, TensorFlow, Keras, Super resolution