Post-Doctoral Researcher, Point Cloud Compression

InterDigital Rennes

About InterDigital

InterDigital develops mobile and video technologies that are at the core of devices, networks, and services worldwide. We solve many of the industry's most critical and complex technical challenges, inventing solutions for more efficient broadband networks, better video delivery, and richer multimedia experiences years ahead of market deployment. InterDigital has licenses and strategic relationships with many of the world's leading technology companies. Founded in 1972, InterDigital is listed on NASDAQ and is included in the S&P MidCap 400® index.

Job Summary

Interdigital Research & Innovation seeks qualified candidates to join Imaging Science Lab as a post-doc in point cloud compression.

The postdoctoral researcher will focus on studying future developments of Point Cloud Compression with deep learning techniques. In a first step, he will gather and analyze state of the art of deep learning techniques applied to point cloud compression. Then, he will implement innovative deep algorithms; first as a pre-processing technique to the point cloud, second as tools part of the decoding process.

Essential Duties And Responsibilities

More generally, the post-doc researcher will be in charge of following items:

- Follow-up the state-of-art of published research and standardization in the field of point cloud and video coding
- Propose and investigate innovative technologies and protect them by disclosures in collaboration with the patent group
- Conduct, present research activities and demonstrate results in conferences, standardization bodies, journals and trade shows
- Participate to the research valorization effort through invention disclosures and technology transfers, participation to tradeshows and publications in peered-review journals and prestigious conferences, [PA1]
- Supervise non-permanent staff (interns).

Qualifications

- PhD in video coding and/or computer graphics
- Appreciated Background in Computer Vision and/or image processing and Deep / Machine Learning.
- A knowledge of video coding standards (e.g. HEVC, VVC, PCC) is a plus
- Experience in software implementation: C/C++, Windows/Linux, Python,...
- Team spirit, enthusiastic, motivated, and creative attitude.
- Good communication skills and ability to promote activities internally and externally.
- Fluent English mandatory, French appreciated

Location: Rennes, France