

## **Perception needs for Extended Reality Headsets**

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This talk presents the importance of Computer Vision and Deep learning techniques for Spatial computing and in specific for an Extended reality headset to be an effective spatial computing platform. The four fundamental perception modalities are introduced: head pose tracking, world reconstruction, eye tracking and hand tracking; emphasizing on the two main general themes: Understanding the world (spatial localization, environment mapping) and Understanding user's intent (eye, gaze and hands). This talk will provide a deep dive into the main modalities along with key challenges, compute needs and open problems.