



Photogrammetry Research Engineer

This is an exciting opportunity to join a new entity at its very early stages.

Our company

Covision Lab is a Computer Vision and AI focused research and application center founded by seven world-leading technology companies. We cooperate with their R&D teams to translate state-of-the-art research into technology by harnessing computer vision, sensor fusion and machine learning. We team up with university researchers to delve into disruptive opportunities. Our aim is to accelerate technology adoption in industrial automation through collaborative competitive advantage in Computer Vision and AI. Check out our website for more information at covisionlab.com.

Our vision for this role

Covision Media Lab is the commercial arm of Covision Lab, selling 3D digitization services of objects and products. The uniqueness of the service shall consist of high fidelity in geometry and appearance. Our ambition is to push 3D modeling technology of small to medium objects to the limits with a hardware-software co-development approach. Check out covisionlab.com/media-lab for more information.

You'll be responsible for and actively developing the 3D reconstruction pipeline and put it into service. There will be research challenges and opportunities to publish your research and attend the major scientific and developer conferences of the field.

How you will help

- Identifying the limitations of state-of-the-art in relation to the service target of Covision Media Lab, as well as contributing to shape the development plan
- Leading and actively developing the 3D reconstruction pipeline for the capture system consisting of 30 cameras in a rig, and you'll be involved in further developments of the capture system
- Converting state-of-the-art research to a reliably working prototype and keeping up-to-date with the latest developments in the field

The capabilities we are looking for

- You know about bundle adjustment, photo-consistency and multi view stereo, BRDF, the challenges of material estimation, and you have at least curiosity-driven interest in differentiable rendering, graph convolutions, and 6D pose estimation
- You have deep technical knowledge of photogrammetry algorithms and hands-on experience with open source 3D reconstruction pipelines and point cloud and mesh processing libraries
- You possess the ability and the needed skills to navigate existing open source implementations and extend them with coding best practices

Basic requirements

- Masters or Ph.D in computer science or related field, ideally on a topic at the intersection of computer vision, graphics and photogrammetry
- [Optional] 2+ years of experience in 3D vision and photogrammetry

This is a **FULL-TIME** role located onsite at our **Bressanone/Dolomites** offices (**South Tyrol region, Italy**).

If you are interested, please send an email to careers@covisionlab.com