



Lead R&D Engineer

Job Overview

As a Lead R&D Engineer, you sit at the intersection of technical strategy, architecture, and team direction. You will oversee technical execution across core R&D tracks (e.g. hardware-software integration, deep learning pipelines, advanced meshing, and colour processing).

You will guide senior and mid-level engineers on complex execution, make fundamental software and algorithm architectural decisions, and ensure that research efforts align directly with company objectives and capture capabilities.

Job Responsibilities

- Lead the architectural design and execution of end-to-end R&D pipelines for multi-camera arrays, LiDAR, and photogrammetry.
- Define technical roadmaps for integrating cutting-edge ML models into core imaging and reconstruction systems.
- Oversee high-level system architecture for high-volume 3D data processing, ensuring scalable deployment and robustness.
- Unblock engineering teams on complex math, performance, hardware-interfacing, or algorithm design issues.
- Partner with capture, hardware, and production leads to ensure R&D output directly enhances business operations.
- Drive code review standards, code maintainability, and continuous engineering improvement across the team.

Ideally

- Minimum 6+ years of R&D experience in computer vision, photogrammetry, machine learning, or 3D systems.
- Extensive experience architecting commercial-grade spatial data software, computational photography solutions, or camera systems.
- Strong leadership abilities with proven experience mentoring engineers and driving research projects to completion.
- Deep proficiency in C++, Python, CUDA, ML frameworks (PyTorch), and classical/modern computer vision algorithms.
- Demonstrated expertise in multi-camera array systems, colour management, point cloud algorithms, and meshing.

Future Development

- Driving strategic technical direction company-wide and progressing to Head of R&D.