Senior Engineer, Computer Vision

Compound Eye

ID: SRN2025-10559

Senior Engineer, Computer Vision
Compound Eye • Full Time • Remote (US) • • $155k - $205k + Competitive Equity

About the Company:
Compound Eye enables machines to understand their surroundings in 3D and in real time using only passive sensors like cameras and IMUs. Their VIDAS™ technology converts video from automotive-grade cameras into a dense, semantic 3D representation of the world, serving as a fully redundant alternative to LiDAR and radar. Compound Eye has customers across automotive, agriculture, healthcare, and defense sectors and has raised $7.9M in funding from Khosla Ventures and other leading investors.

Roles and Responsibilities:

- Develop and optimize real-time 3D computer vision algorithms for perception and scene reconstruction.
- Implement pose estimation, calibration, and sensor fusion techniques.
- Design and maintain high-performance, production-quality C++ code.
- Solve complex mathematical problems in 3D geometry, SLAM, and non-linear optimization.
- Work with highly parallel programming frameworks such as CUDA, Metal, or OpenCL to optimize computer vision workloads.
- Collaborate with cross-functional teams to integrate vision models into real-world applications.
- Ensure seamless remote collaboration while accommodating PST working hours.
- Work in defense and related fields with a focus on real-world applications.

Job Requirements:

- 5-15 years of experience in software engineering, developing computer vision algorithms.
- 3+ years of direct experience in 3D computer vision (e.g., real-time perception, 3D reconstruction, SLAM).
- Hands-on experience with pose estimation, calibration, and sensor fusion.
- Extensive expertise in writing production-quality C++ code.
- Strong mathematical background in 3D geometry, SLAM, and non-linear optimization.
- Familiarity with highly parallel programming frameworks such as CUDA, Metal, or OpenCL.
- PhD or Master's in Computer Science (focus on Computer Vision, Robotics, Machine Learning, or Engineering).
- Proven experience productionizing computer vision models in industry settings (not just research).
- Ability to work remotely while accommodating PST hours.

❌ **Do NOT Apply If You:**

- Require visa sponsorship (H1B, TN, etc.).
- Have a history of frequent short tenures (job hopping).
- Have only worked in big corporations (Uber, Intel, etc.) without startup experience.
- Come from an IT consulting background (Infosys, Tata, Capgemini, Cognizant, Wipro, etc.).
- Graduated from coding bootcamps (Full Stack Academy, Hack Reactor, etc.).
- Have fake or misrepresented profiles.

Interview Process

1. Coding Challenge (90 min max, top candidates finish in 30-45 min) – HackerRank-based challenge.
2. Technical Zoom Interview 1 (50 min) – Problem-solving session related to real-world applications.
3. Multipart Technical Interview (3 hrs) – Two deep-dive technical interviews + Culture Add interview. Candidates may also meet the CEO (15-30 min).
4. Reference Checks – 10-15 min calls with 3 references.
5. Offer Extended