



DreamVu

Job Title: Robotics Research Scientist

Period: Full Time

Job purpose:

We are looking for research scientists who can extend and develop algorithms for our machine vision platform for robotics and autonomous vehicles. You will get an hands on experience by doing research and rapid prototyping using a combination of state-of-the-art computer vision algorithms. You will be required to perform experimentations and publish in top tier conferences.

Duties & Responsibilities:

- You'll develop creative architectures to address the emerging demands of computer vision and machine learning algorithms, specifically in the areas of autonomous cars, robots and drones.
- Understand and analyze the interplay between hardware, software, and media processing algorithms.
- Collaborate with a diverse set of teams across the company, spanning software, research, engineering, and product groups.
- Publish original research and speak at conferences and events.
- Understanding different architectures and able to develop applications.
- Implement and enhance processing pipeline and software architecture that allows optimal performance and flexibility for experimentation.
- Collecting datasets for in-depth understanding of problems.
- You will partner with system software engineering leads to build shipping industrial strength code.

Required Skills & Experience:

- Basic familiarity with 3D computer graphics.
- Background in Computer Vision, Machine learning, Deep learning.
- Experience in researching, developing, and implementing novel computer vision algorithms from scratch.
- Image processing experience, including colour correction, lens distortion, color segmentation, image enhancements etc.
- C++ development skills. OpenCV, MATLAB, CUDA required.
- Background in applied mathematics and/or computer science, in particular machine learning, statistics, and graphs: software and algorithms.
- Experience in state-of-the-art numerical algorithms and machine learning technologies
- Familiarity with one or more of the following: MXNet, Pytorch, Caffe, Tensor flow.
- Experience working with large datasets and Deep Learning algorithms
- Familiarity with robotics algorithms such as SLAM, particle filters, Kalman Filter, ICP, calibrations, etc.
- Familiarity with various sensor technologies such as LiDAR, cameras, IMU, etc.
- Strong foundations in applied linear algebra, 3D graphics and 3D data manipulations

Desired Skills & Experience / Bonus Points:

- Knowledge of parallel computing, OpenCL, GPU is a plus
- Knowledge software optimization and embedded programming is a plus
- Experience in depth estimation, 3D reconstruction, multi-view geometry calibration, and optical flow
- Experience in computational imaging/photography is a plus.
- Experience in Intrinsic scene and object classification, camera and/or video pipeline.
- Previous experience on the automotive industry (ADAS systems), SLAM, or related technologies.
- Software development on embedded platforms or large scale cloud services.

Minimum Qualification:

- MS in Computer Science or Electrical Engineering. Ph.D. is preferred
- 2+ years of software development experience.
- Publications at top-tier peer-reviewed conferences or journals. Publications in TPAMI, CVPR, ICCV, IJCV, ECCV, NIPS, SIGGRAPH, WACV, BMVC, ICML, ICRA, IROS, IJCAI, ACL, ICASSP is a plus.

How to Apply

Send your resume and portfolio (if possible) to careers@dreamvu.com