



DreamVu

Job Title: Computational Imaging 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.
- Experience in Computational Photography, Computational Imaging, Image Processing and Computer Vision.
- Experience in researching, developing, and implementing novel computer vision algorithms from scratch.
- Familiarity in image sensors, optics and lens design.
- Image processing experience, including colour correction, lens distortion, color segmentation, image enhancements etc.
- Expertise in areas of multiple view geometry, image fusion, computational photography, super-resolution, image quality.
- 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.

Desired Skills & Experience / Bonus Points:

- Knowledge of parallel computing, OpenCL, GPU 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.

Minimum Qualification:

- MS in Computer Science or Electrical Engineering. Ph.D. is preferred
- Publications at top-tier peer-reviewed conferences or journals. Publications in TPAMI, CVPR, ICCV, IJCV, ICCP, ECCV, NIPS, SIGGRAPH is a plus.

How to Apply

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