

Machine Learning Engineer/Scientist for CARLA

Project motivation

CARLA (<http://carla.org>) is an internationally recognized project that brings the state of the art in autonomous driving simulation to both industry and academic users. CARLA started in 2016 as an open-source project sponsored by Intel and developed at the Computer Vision Center (Barcelona, Spain) and the Embodied AI Foundation (California, US). Since then, CARLA has become the top-one open-source simulator for autonomous driving, used and supported by international organizations such as Toyota Research Institute, General Motors, Udacity, Lyft, Valeo, MIT, Stanford, University of Michigan, and Berkeley among many others. Our simulator is built upon Unreal Engine 4. Through this project, we aim to democratize and standardize the development and verification of automated vehicles. We look to provide society with the right tool to boost progress in this critical field, bringing this technology to the masses. That is why CARLA is and it will always be developed and released under the open-source paradigm (all our code and assets).

We are currently looking for a machine learning engineer/scientist to develop deep models to support the CARLA simulation process. The candidate must be able to search and distill the scientific literature to determine the state-of-the-art for developing the right models. Candidates are expected to implement and adapt models based on deep learning using their strong machine learning skills.

Job responsibilities

- Research and develop deep learning models to support the CARLA simulation process. These models include Convolutional Neural Networks (CNNs), Graph Neural Networks (GNNs), etc.
- Collaborate with a multidisciplinary team of engineers, artists, machine learning scientists, computer vision researchers and autonomous driving folks from all over the world. You will have to attend meetings with industry partners to come up with solutions to their needs.

Job requirements

- At least a master's degree with a strong component of deep learning, and demonstrable experience in the use of deep learning in practical problems; preferably a Ph.D. degree where deep learning has been the core technological tool.
- Fluency in python and strong knowledge of deep learning frameworks such as Tensorflow and/or Pytorch.
- Knowledge of Linux and Windows environments.
- Experience in open-source tools, especially GitHub.
- Good online communication and team collaboration skills.
- English fluency.

Good to have

- Experience with Graph Neural Networks (GNNs).
- Experience applying deep learning to physical problems.

What do we provide?

- Very flexible schedule within a fun, supportive and engaging environment.
- Opportunities to pursue and work on cutting-edge technologies within the field of Autonomous Driving and simulation.
- Location: Computer Vision Center (CVC), Barcelona, Spain, or remote

Applications Procedure

Applicants must submit their curriculum vitae through the application online form http://www.cvc.uab.es/?page_id=107, indicating offer code: 20211109_MLSc_CARLA. Important! It is imperative to indicate this reference, otherwise, application will not be processed.

Selection Procedure Steps:

1. Pre-selection: determination of compliance with the minimum requirements of the offer.
2. Selection: assessment of the preselected candidates by scoring based on objective criteria.
3. Potential candidates will be contacted to set up an interview.