RESEARCH INTERN & VISIT OPPORTUNITIES (UC Berkeley)

Introduction to MSC Laboratory

MSC Lab is led by Professor Masayoshi Tomizuka, who is one of the leading experts in the fields of electro-mechanical systems and vehicle control. There are more than 20 Ph.D. students who are currently conducting research on autonomous driving and robotics. These years, many award-winning research papers have been published and presented at top conferences. You can find our current research here.

In this research internship or visit, you'll:

- Conduct cutting-edge research together with Ph.D. students to develop new algorithms or improve existing algorithms to solve challenging real-world problems, such as interaction modeling, behavior modeling, trajectory prediction, decision making and motion planning in multi-agent systems.
- Participate in publishing findings in top academic conferences and journals, such as CVPR, ICCV, ECCV, NeurIPS, RSS, ICRA, IROS, ICML, etc..
- Have a chance to get a recommendation letter if you achieve outstanding performance during the internship.

At a minimum we'd like you to have:

- Undergraduate students: *Junior or Senior*; Graduate students: *Master or Ph.D.*
- Basic knowledge in linear algebra and probability.
- Basic knowledge in machine learning, computer vision and/or robotics.
- Experience in at least one programming language: Python, MATLAB and/or C++.

It's preferred if you have:

- Strong motivation to conduct academic research and explore novel ideas. (The ones who plan to pursue a Ph.D. degree are highly preferred and encouraged.)
- Knowledge of deep learning frameworks (e,g. PyTorch, Tensorflow, etc.)
- Experience in deep learning models (e.g. RNN, CNN, VAE, GAN, GNN, etc)
- Experience in probabilistic methods (e.g. PGM, BNN, KF, PF, etc)
- Experience in (inverse) reinforcement learning and meta-learning methods.
- Publication record in computer vision, robotics, autonomous driving and machine learning conferences or journals.

How to apply:

- We will accept applications on a rolling basis until the roles are filled.
- Please fill in the application form via this link (Google form).
- Please fill in applicable information as much as possible for better evaluation.
- We will carefully review all the application materials and contact you via email for an interview if there is a good match.

Note:

The topics and methods mentioned above and in the application form are the main focuses of our research, but if you have other interesting topics or ideas, we may also consider providing you with an opportunity.