

PhD in Perception and Forecasting, Computer Vision and Machine Learning At the Dept. of Computer Science, Sapienza University, Rome (Italy)

Call for expression of interest



SAPIENZA
UNIVERSITÀ DI ROMA

The newly founded Perception and Intelligence Lab (PINLab) is seeking exceptional and highly-motivated full-time Ph.D. students to research on one or a combination of these topics:

- Forecasting the future motion of people, vehicles and other objects
- Detection, recognition and re-identification with RGB and novel event-cameras
- Learning to learn (meta learning) and to generalize (domain adaptation)

The research work would leverage and define novel state-of-the-art models based on Deep Neural Networks and Spike Neural Networks, addressing the network memory, learning, reasoning and adaptation capabilities. Initial work would stand on most recent achievements from our team, published at the TOP conference (CVPR) and journal (TPAMI) in the field:

- B Munjal, S Amin, F Tombari, F Galasso. Query-guided End-to-End Person Search. *CVPR'19*. (<https://arxiv.org/abs/1905.01203>)
- I Hasan, F Setti, T Tsesmelis, V Belagiannis, S Amin, A Del Bue, M Cristani, F Galasso. Forecasting People Trajectories and Head Poses by Jointly Reasoning on Tracklets and Vislets. *TPAMI'19* (<https://arxiv.org/abs/1901.02000>)
- I Hasan, F Setti, T Tsesmelis, A Del Bue, F Galasso, M Cristani. MX-LSTM: mixing tracklets and vislets to jointly forecast trajectories and head poses. *CVPR'18* (<https://arxiv.org/abs/1805.00652>)

The PhD student would collaborate with scientists at the Dept. of Computer Science at Sapienza (<https://www.di.uniroma1.it/en>), a department of Excellence in Italy: #1 in Computer Science and in the top 1% among all other Italian departments. The student would be given the opportunity to collaborate with international academic partners and companies, to experience research and innovation transfer.

We provide equal opportunities to all applicants and favour diversity. Any expertise or prior knowledge in computer vision and machine learning is welcome. Prior publication at international conferences is an advantage. Ability to program in Python/C/C++ is desirable, as well as prior experience with Pytorch and TensorFlow. Other programming languages, communication skills and team play will also be welcome.

Submit your expression of interest by 15 March 2020

Direct your submission to Prof. Fabio Galasso (galasso@di.uniroma1.it), head of the PINLab.

Include your CV, cover letter, publication list and contact details of 2 referees.

Eligibility: the Ph.D. call would be funded by Sapienza and reserved to foreign candidates (non-Italian and not having resided in Italian for more than 6 months in the previous 3 years).