VisLab internship opportunities

referring: prof. Stefano Ghidoni
Who’s VisLab

A high-tech company based in Parma, VisLab is focused on all aspects of ADAS and autonomous driving—from the fundamentals of environmental perception all the way to product and deployment—including machine learning, deep neural networks (DNNs), stereovision, robotics, sensor fusion, planning, system calibration, and more.

Founded in the late ’90s as a research laboratory at the University of Parma, VisLab quickly established itself as a pioneer in vehicle autonomy before spinning off from the University in 2009. Since then, VisLab has continued its pioneering research under founder Alberto Broggi, establishing several internationally recognized milestones in self-driving along the way.

In 2015, VisLab was acquired by Ambarella, a publicly traded semiconductor company based in Silicon Valley (Nasdaq:AMBA) headquartered in Santa Clara (California, USA) and with offices in Detroit (Michigan, USA), Munich (Germany), Hong Kong, Hsinchu (Taiwan), SeongNam City (South Korea), Shanghai (China), Shenzhen (China), and Yokohama (Japan).

Specializing in the development of advanced computer vision hardware processors, Ambarella relies on VisLab for core research and development across all the markets with a particular focus on automotive. Like Ambarella, VisLab offers a Silicon-Valley-like work environment—energetic, open, informal, and collaborative—but still remains an Italian company, based in Parma, Italy.

VisLab provides top level research to Ambarella in the most contemporary high-tech fields such as autonomous driving, robotics, and deep learning. VisLab equips and operates a fleet of autonomous vehicles and received the first authorization from the Italian Ministry of Transportation to run autonomous driving tests on open roads. Besides Italy, VisLab owns special permits to run autonomous tests in Nevada and California.

VisLab, headquartered in the University of Parma campus, is tightly connected to the Academia and provides teaching activities to the local/regional University; selected PhD students and graduate students are offered internships to join VisLab’s leading edge research activities.
Who’s VisLab

Stereo

CV chip

CNN

1998

2010

Autonomous driving

1998

2010
Possible internships+thesis (at least 6 months):

- CNN for real time environment understanding
  - Automatic generation of GT
  - Use of RNN
  - CNN model development and training

- CNN for path planner
  - Automatic generation of GT
  - Test different approaches for training
  - Path Planner / Trajectory tracking