



Placement Opportunity

Undergraduate (BA) student: ☒

Graduate (MA) student: ☒

Reference:	Lynxight – Computer Vision
Company Name:	Lynxight
Company Type: (Startup/Mature/...)	Startup
Location: (full address)	4 Ha'Mada st., Yokneam-Ilit 2066718, Israel
Duration of stay: (min 2, max 6 months)	3-6 months

Company Description:

Lynxight is a computer vision platform for the aquatic sector. We are developing a new class of computer vision technology for above-water and under-water applications, providing superior detection, tracking and classification capabilities for numerous applications where sought-after objects lie on the surface or below the water line.

The company's first commercial vertical is the pool sector, in which it serves some of the most notable chains across northern Europe, the U.S. and Israel. In this newly released product, the system makes use of advanced overhead cameras to monitor all pool types, applying computer vision with deep learning algorithms to uncover safety incidents and swimmer patterns that would otherwise go unnoticed. The system captures unusual swimmer behavior and a variety of pool analytics to enable proactive lifeguarding and optimize pool resources.

Job Description and Tasks:

Internships at Lynxight are built to achieve a reliable win-win scenario – the interns gain experience in solving real world problems and understanding system-level considerations as well as algorithmic ones, and the company gains a fresh perspective and solutions to well defined, self-contained problems. This has been the case with previous internships conducted in collaboration with MIT, Columbia and TU Munich.

Together with the intern, and taking the internship duration into consideration, we will choose one problem from a list of well-defined computer vision problems at hand. Topics range from classic computer vision issues such as keypoint registration, image enhancements and geometric modeling, to deep learning-based issues such as image segmentation, object classification and tracking.

We want the intern to experience the entire, albeit shortened, R&D lifecycle, so in addition to algorithmic modeling, the intern will participate in the other important development aspects: software integration including real-time constraints, benchmarking and real-world experiments.

Essential Requirements:

- At least 2 years into, or already graduated BSc. in Computer Science, Electrical Engineering or related fields.
- At least 1 years of experience in computer vision, preferably with natural images and real-world scenarios
- Proficiency in Python, preferably also experience with OpenCV, Numpy, PyTorch and TensorFlow
- Strong understanding of object-oriented design concepts
- Experience with deep learning for vision – an advantage
- Experience in code optimization and integration to multi-threading systems – an advantage
- Experience in integrating algorithmic blocks to GPGPU – an advantage
- **A self-learner, independent problem solver who thinks creatively!**
- **Great interpersonal skills and fun to work with!**

Remuneration Details:

Lunch and transportation expenses of the intern will be covered. We will also be glad to assist with finding a comfortable accommodation and support with any other matter (including sight-seeing and “experiencing Israel” suggestions).