



Medirlab Ltd.

European Defence Fund Proposal

**Looking for a consortium:
EDF-2024-LS-RA-CHALLENGE-SENS-RADNP**

ABOUT

Medirlab Ltd. specializes in developing advanced thermal camera systems designed for the defense market. Our solutions integrate cutting-edge hardware and software, providing unparalleled performance and reliability.

WHAT WE CAN DO

High-tech Electro-optical Products

- Handheld and multisensor reconnaissance systems with uncooled or cooled thermal sensors, visible cameras, laser rangefinders, and pan/tilt units. Portable and fixed systems.
- Special purpose products according to customer needs. For example, explosion-proof (ATEX) thermal cameras for firefighters.
- Privately owned Budapest-based SME, founded in 2008.



PROPOSED SOLUTION

Infrared Visual SLAM for Autonomous Drone Navigation

Medirlab Ltd. proposes a cutting-edge research initiative for EDF-2024-LS-RA-CHALLENGE-SENS-RADNP focused on integrating Visual Simultaneous Localization and Mapping (SLAM) technology for drone navigation. The concept explores the use of infrared imaging to enhance navigation accuracy in low-light and challenging environments.

By leveraging dual-camera inputs, the research aims to develop advanced algorithms enabling drones to navigate complex terrains autonomously. This innovative approach has the potential to significantly improve drone capabilities for applications in surveillance, search and rescue, and tactical operations.



CONTACT

Medirlab Ltd.

Ákos Nagy
H-1145 Amerika út 98.
Budapest, Hungary
www.medirlab.com
akos.nagy@medirlab.hu