Post-doctoral position Fusion of aerial thermal and satellite multi-spectral imaging for remote sensing-based irrigation management



Topic

A postdoctoral position is available in remote sensing for precision irrigation – combining high resolution aerial thermal-images with satellite VIS-NIR data to support irrigation decision.

Brief description

Satellite thermal imaging have coarse spatial resolution and aerial platforms require substantial financial investments, which may inhibit their large-scale adoption. The study aims to increase the capacity of aerial thermal imaging by fusing satellite multi-spectral images in the VIS-NIR range. The study incorporates image processing and "big-data" analysis techniques (deep and machine learning)

Role of candidate

The successful candidate is expected to develop semi-automatic tools for near-real-time acquisition and analysis of aerial and satellite images of different characteristics, lead the research, and summarize the results in reports and scientific publications.

Funding

The position is part of a funded multi-disciplinary project of the Chief scientist of the Ministry of Agriculture, Israel.

Funding is guaranteed for 12 months, with a possible extension for a second year.

Desired skills & experience

- PhD in agriculture, geography, engineering, computer science, mathematics, or a related field with strong background in image analysis
- Adv. Experience with programming software (e.g., R/Matlab/Python)
- Adv. Experience with machine learning techniques

Start date

Flexible, preferably August 2019

Application

Qualified applicants (PhD) are requested to send:

- Letter of intent including a description of technical expertise
- CV
- Copy of the PhD dissertation abstract
- Names and emails of 2 referees

Contact

Dr. Yafit Cohen

Institute of Agricultural Engineering Agricultural Research Organization, Volcani center, Israel yafitush@volcani.agri.gov.il +972-50-6220596 http://www.agri.gov.il/people/710.aspx