

# Regularization techniques in variational formulations and deep learning applied to image and surface processing

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- The main goal of this research project is to analyze and improve advanced numerical techniques to solve ill posed inverse problems related to image and surface processing
- The suggested approaches are variational formulations and regularized solutions are obtained through advance optimization methods for nonlinear cost functions.
- Regularization techniques, combining ad-hoc mathematical variational models and cutting edge deep learning techniques will be also investigated.

- Neuromathematics of vision - prof.ssa Giovanna Citti
- Machine Learning, Computer vision, Architecture for Big-Data Processing - prof. Luigi Di Stefano, prof. Luca Benini