

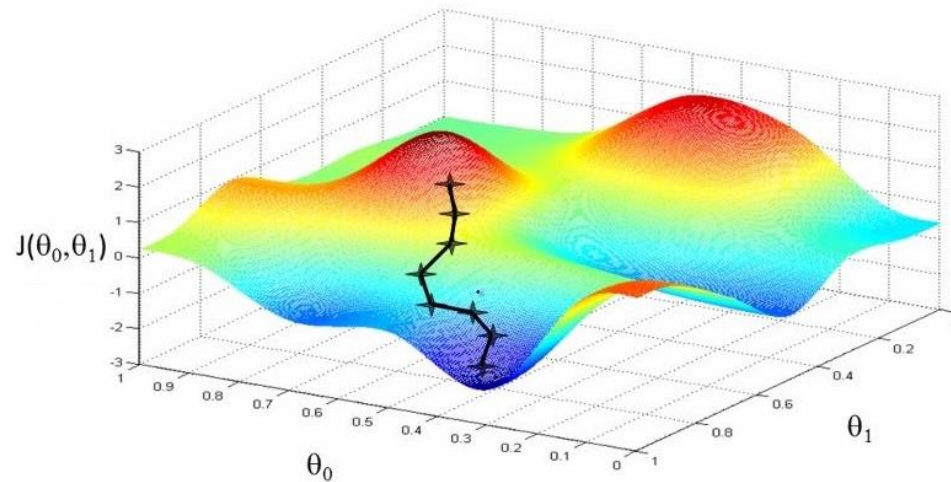


# **M2 – Optimisation in Computer Vision: Project Presentation**

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# Objectives

1. To apply the main optimisation methods to real computer vision problems
  2. To better understand the concept of optimisation in computer vision
- The objective is to apply and use the learned knowledge, not to make the best system



# Methodology

- Implement optimisation methods for the image inpainting and image segmentation problems



# Classes

## **1: Inpainting**

Class Thu. Oct. 7th 18h

Deliverable Thu. Oct. 14th 18h

## **2: Poisson editing**

Class Thu. Oct. 14th 18h

Deliverable Thu. Oct. 21st 18h

## **3: Level set segmentation**

Class Thu. Oct. 21st 18h

Deliverable Thu. Nov. 4th 18h

## **4: Graphical methods**

Class Thu. Nov. 4th 18h

Deliverable Thu. Nov. 11th 18h

## **Final presentations**

Class Thu. Nov. 18th. 16h

# Deliverable

Presentation (name: **Week1 – G1**.pptx, or .pdf) that includes:

1. Explanation of the **problem**
  2. Explanation of the **solution**
  3. A few slides with the main parts of the **code**, with simple explanations
  4. Results (including with your own **examples**, be creative)
  5. Discussion & **conclusions**
- + Source code in Zip

# Teams

- Three students per team
- Teamwork is important
- Each student should contribute to the work, learn from the project and understand each part of the course
- All team members will be asked questions during the final presentations

# Final Presentation

1. Your understanding of optimisation for computer vision
2. A paper of your choice that used optimisation to solve a computer vision problem
3. Summary of each part of the project
4. Discussion of optimisation for computer vision

# Final Mark

Mark =  $0.6 (\text{Part 1} + \text{Part 2} + \text{Part 3} + \text{Part 4}) / 4 + 0.4 \text{ Final Presentation}$