

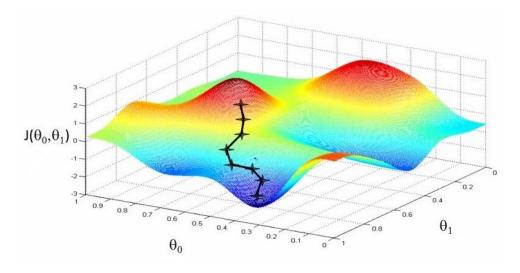
M2 – Optimisation in Computer Vision: Project Presentation

Karim Lekadir karim.lekadir@ub.edu

Objectives

- 1. To apply the main optimisation methods to real computer vision problems
- 2. To better understand the concept of optimisation in computer vision

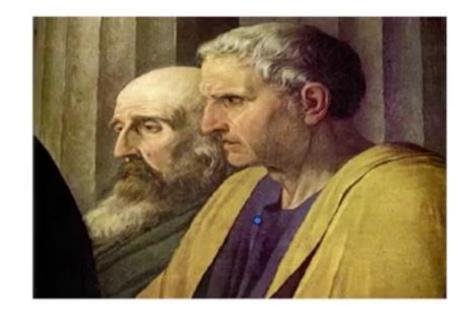
 The objective is to apply and use the learned knowledge, not to make the best system



Methodology

Implement optimisation methods for the image inpainting and image segmentation problems





Classes

1: Inpainting

Class Thu. Oct. 6th 18h

Deliverable Thu. Oct. 13th 18h

2: Poisson editing

Class Thu. Oct. 13th 18h

Deliverable Thu. Oct. 20th 18h

3: Level set segmentation

Class Tue. Oct. 18th 18h

Deliverable Thu. Oct. 27th 18h

4: Graphical methods

Class Thu. Nov. 3rd 18h

Deliverable Thu. Nov. 10th 18h

Final presentations

Thu. Nov. 17th. 16h-19h

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 (Part 1 + Part 2 + Part 3 + Part 4) / 4 + 0.4 Final Presentation