

ORGANISATION

2D-3D Image&Sound

Catherine SOLADIE

TEACHING TEAM

Catherine SOLADIE



Simon LE GLAIVE



Renaud SEGUIER



SCHEDULING

60 HEE

Introduction

1

60 HEE

Online courses

4

Peer review

3

Tools understanding

4

Bureau d'étude

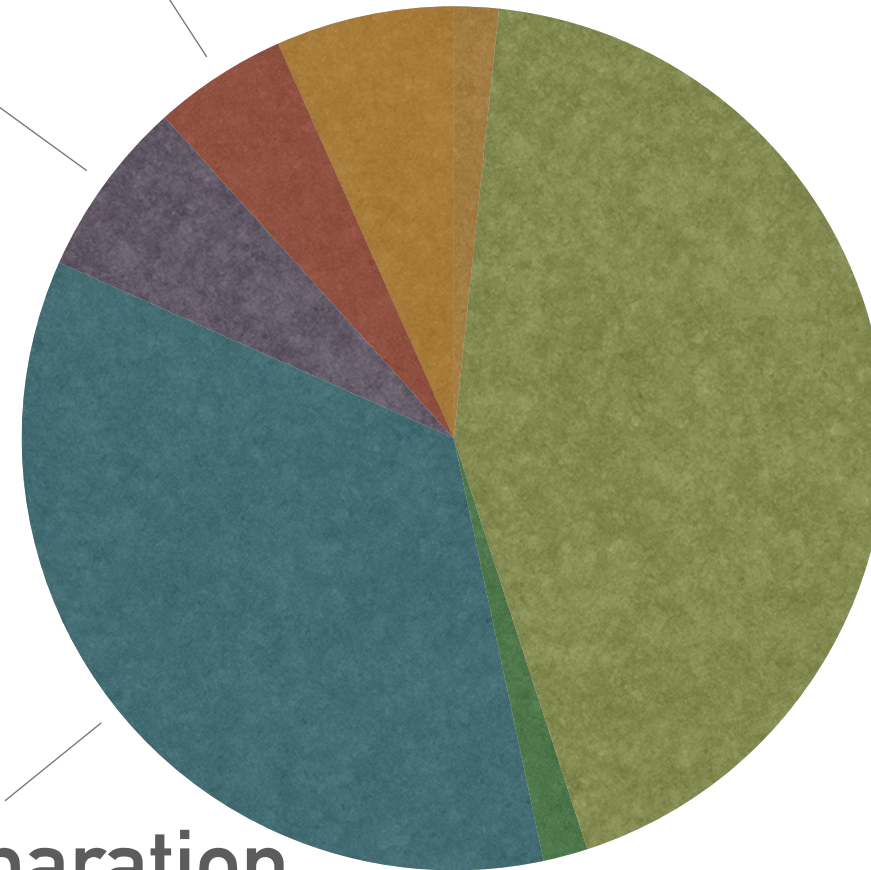
26

Evaluation preparation

21

Exam

1



WHAT IS A BE ?

What is a *bureau d'étude* ?

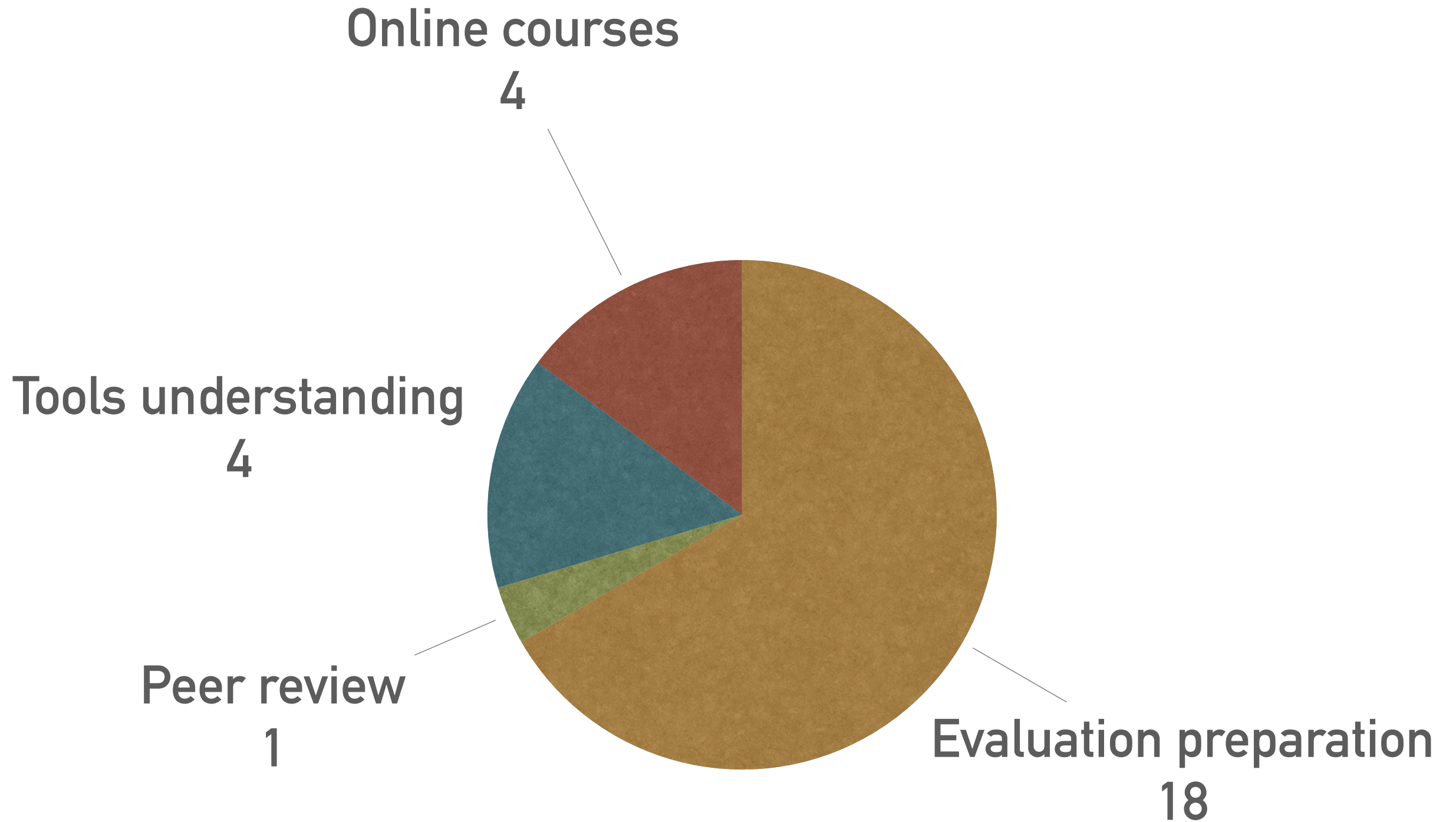
A *bureau d'étude* is a course alternating **theory and practice**. It aims at discovering some theme related to the module. Most of the time, it is a 3 HPE classroom-based lesson on a specific concept.

Its abbreviation is BE.

HPE – 11 SESSIONS OF 3 HOURS

		Date	Starts at	Ends at	Who	Title
Eval	Intro	2021-02-10	8:30	09:00	Catherine Soladié	Introduction, scheduling, goals, evaluation
	d'étude	2021-02-10	09:00	10:00	Catherine Soladié	Image & Segmentation
		2021-02-12	10:30	12:00	Catherine Soladié	Image & Segmentation
		2021-02-16	8:30	12:00	Simon Leglaive	The audio spectrogram
		2021-02-18	8:30	12:00	Simon Leglaive	Speech production and modelling
		2021-02-19	13:30	16:45	Catherine Soladié	Q&A on Evaluation
	9 bureaux	2021-03-01	13:30	16:45	Simon Leglaive	Spatial audio
		2021-03-02	8:30	12:00	Renaud Segulier	3D Image Synthesis
		2021-03-03	8:30	12:00	Renaud Segulier	PCA
		2021-03-10	13:30	16:45	Catherine Soladié	Filtering & wavelets
		2021-03-18	8:30	12:00	Renaud Segulier	Text Analysis
		2021-03-22	8:30	12:00	Catherine Soladié	Feature extraction
		2021-03-25	8:30	12:00	Catherine Soladié	MCQ + Peer review

E-LEARNING – 27 HOURS



EVALUATIONS

“

Any fool can know.
The point is to understand.

-Albert Einstein

U

“

Those who know, do.
Those that understand, teach.

-Aristotle

⇒

For the evaluation, you will have to teach !

FOR THE EVALUATION, YOU WILL HAVE TO TEACH!

Prepare a course for your classmates:

5 min of
theory

30 min of
practice

TEACH WHAT ?

Any theme related to 2D-3D image, sound and text processing

Specific method

Research paper explanation

Method in a topic seen in a BE

HOG for feature extraction

Overview

History on a topic of Image Processing

Topic not presented in BE

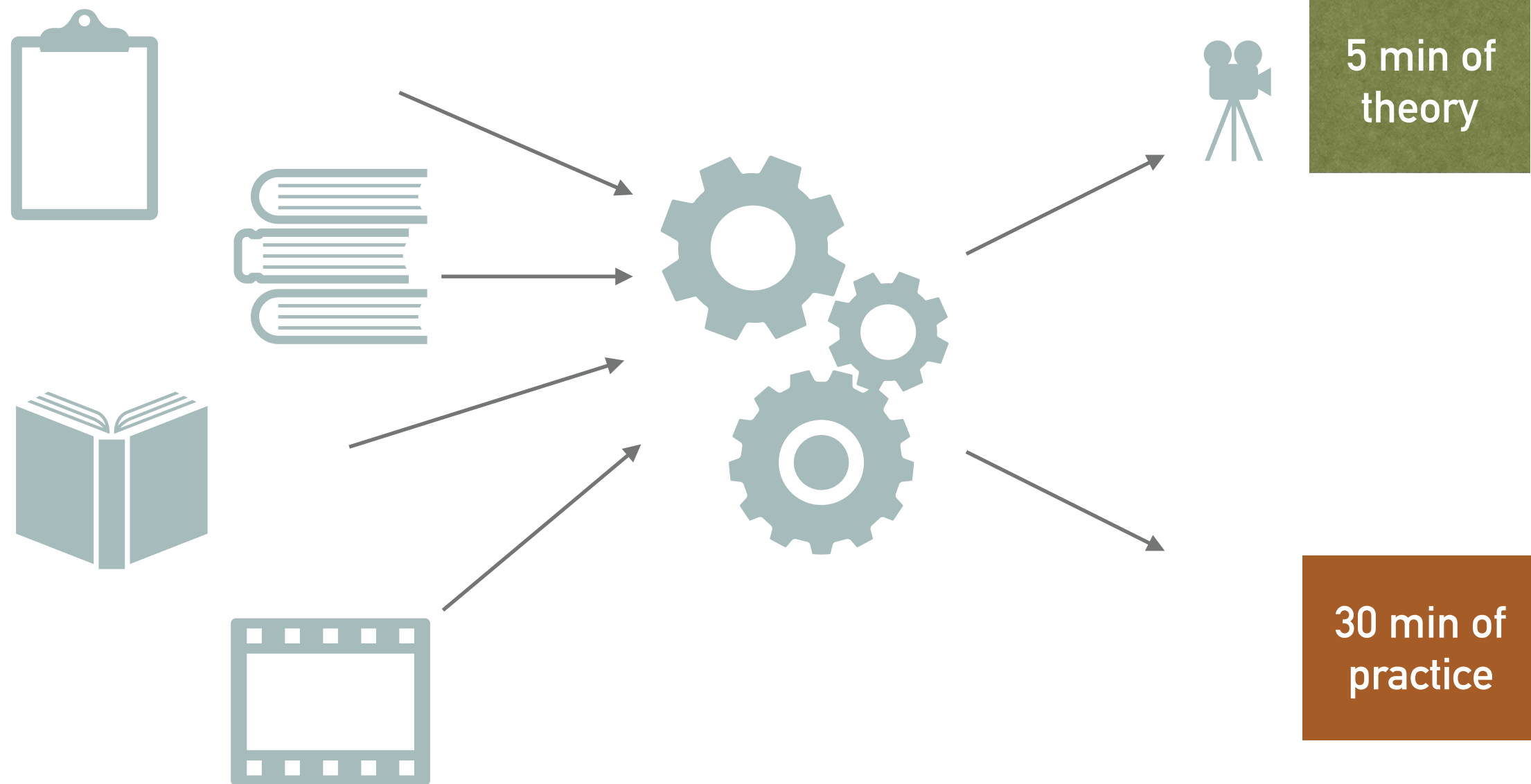
Face detection via Viola-Jones algorithm

Whatever you want

...

FOR THE EVALUATION, YOU WILL HAVE TO TEACH!

In green: *individual work*, in red: *group work*



DEADLINES

In green: individual work, in red: group work

15 February: Groups and titles

1 March: Video on the theoretical part

10 March: Review 5 of your classmates' videos

18 March: Practical work

25 March: Review 3 of your classmates' practical work

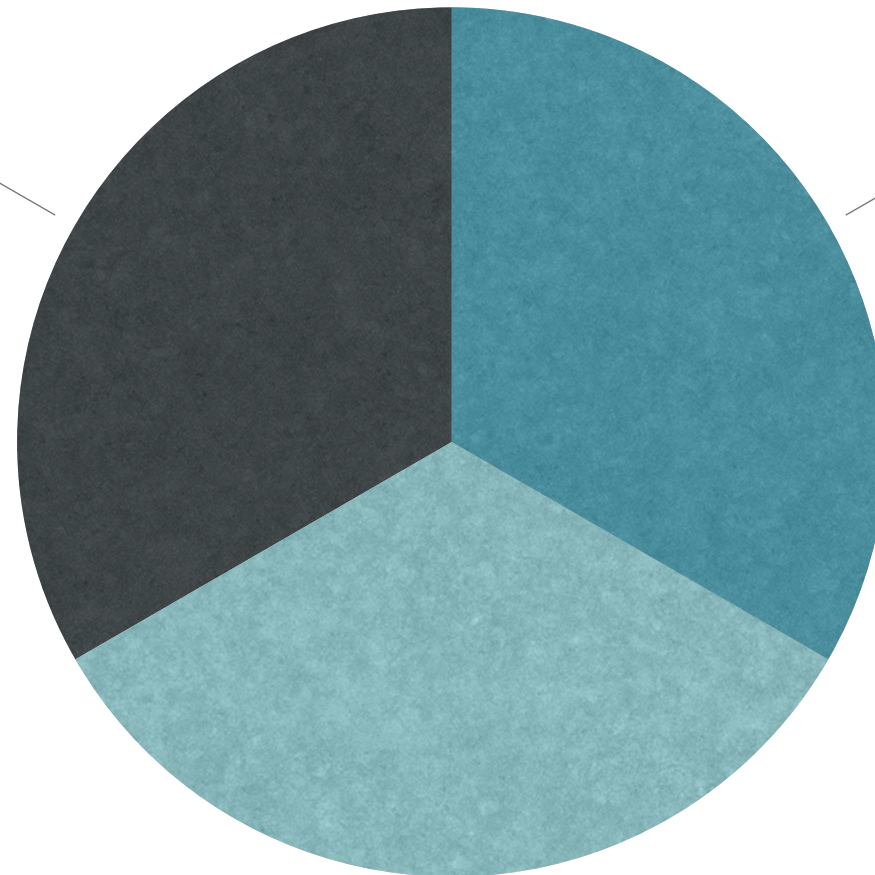
3 MARKS

BE - Practice

7

MCQ

7



BE - Theory

7

0.5 HPE OF MCQ

- Individual evaluation
- 30 min, 30 questions
- Example :
 - What SIFT means ? (4 possible answers)
 - Which of the following algorithms could you use for image segmentation ?

DEADLINES

In green: individual work, in red: group work

25 March: MCQ

DEADLINES AND REQUIREMENTS ON EDUNAO

PREREQUISITES

PREREQUISITES: AN ENHANCEMENT MODULE

- Algorithms
 - Understand basics of programming (if then else)
- Signal processing (ST4)
- Statistics & Machine learning (ST4)

QUESTIONS ?