

## Title

## Automatic Facial Expression Recognition for Ambient Assistance

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Duration: 30 – 45 min

**En Français :** *Reconnaissance des expressions faciales pour l'assistance ambiante.* 

## Abstract

In the last decades, the world has witnessed important advances in terms of information and communication technologies. Indeed, we benefit from the use of these technologies in our daily lives. One of their most important uses remains ambient assistant. They are generally used in smart environments or ambient assisted living where they provide guidance in order to improve the productivity and ensure security and safety. These systems are particularly useful in ensuring the wellbeing of the elderly and people suffering from cognitive deficiency.

In this presentation, I will be talking about my Ph.D. thesis work. It will be divided into two main parts, the first one is dedicated to automatic facial expression recognition, while the second one is about ambient assistance. In both parts, I will introduce fundamentals, related works and proposed methods. At the end, I will be describing how automatic facial expression recognition contributes to improve ambient assistance.

## Plan

- 1. Introduction
- 2. Automatic Facial Expression Recognition
  - a. Fundamentals
  - b. Related works
  - c. Proposed methods
- 3. Ambient Assistance
  - a. Fundamentals
  - b. Related works
  - c. Proposed method
- 4. Proposed system
- 5. Conclusion