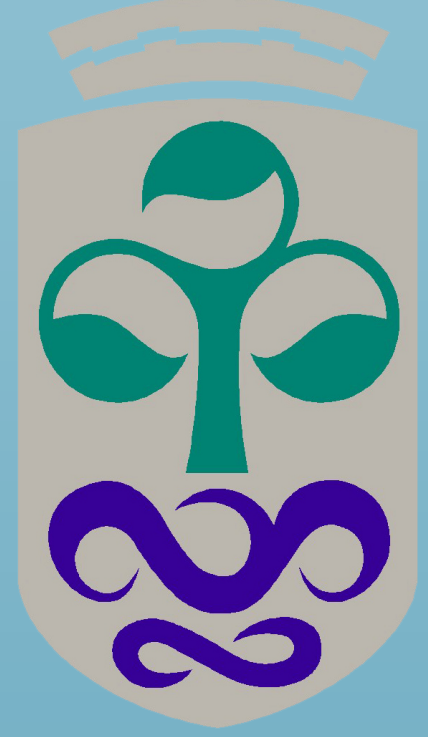# ADAPTIVE E-LEARNING CONTENT GENERATION BASED ON SOCIAL MEDIA INTERACTION

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Motivation of the work

- The usage of Adaptive and Web-based Intelligent educational systems is a growing feature in today's learning ecosystem
- Many of these systems are attempting to harness the power of social media networks (such as Twitter) to enhance the learning process
- However, the full potential of Twitter in education has not been entirely utilized yet
- This work is focused on extracting learner's features from his/her twitter interaction, and recommending a personalized educational content to different learners based on their twitter interaction

Thesis Objectives

Build an Adaptive Intelligent learning management system (Adaptive ILMS) that:

- Develops Content ontology
- Utilize Personal Learning Networks to personalize content by recommending resources as well as people (experts or peers) to learners
- Profiles learners by extracting features from their twitter interaction
- Adapts content according to the learner profile
- Clusters learner profiles hierarchically
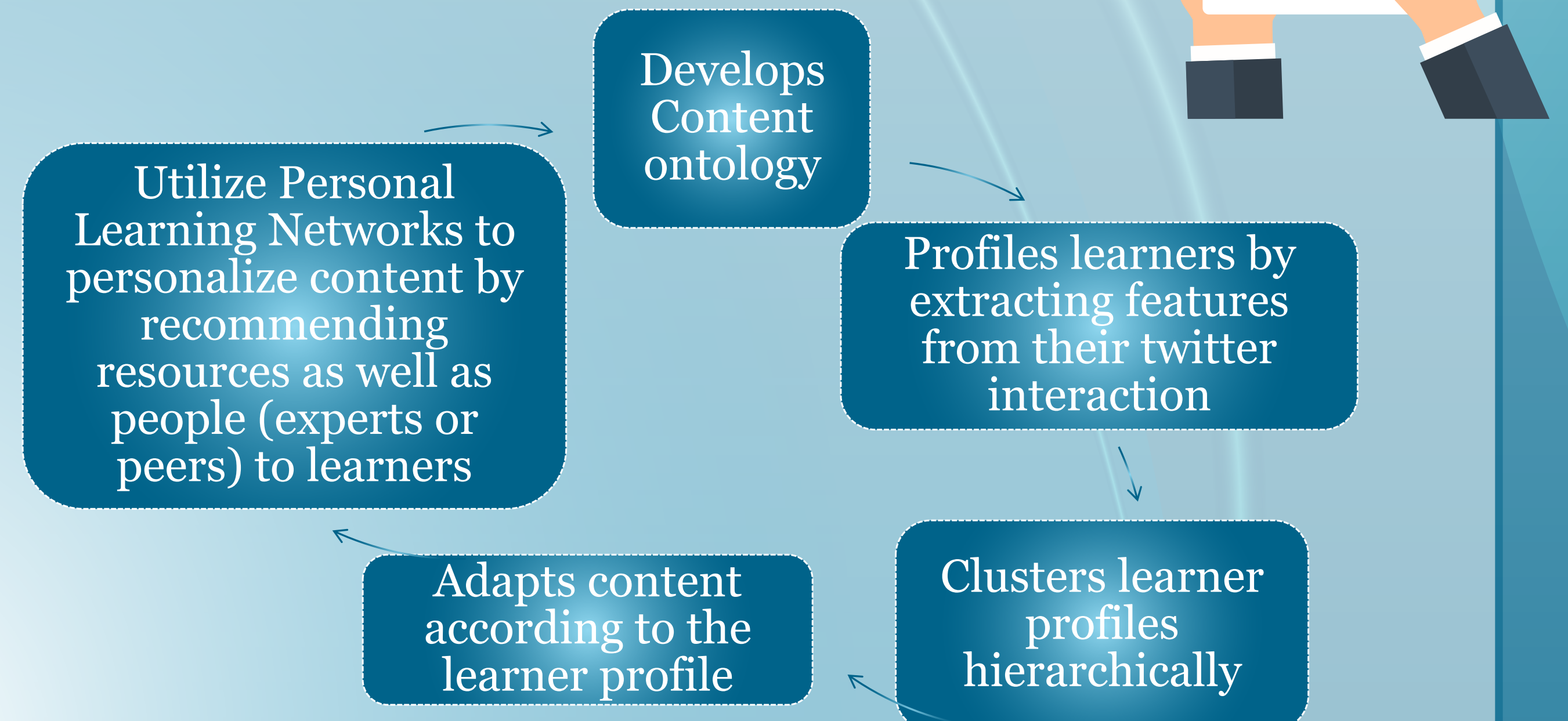
Research plan

- Literature review
- Running over an initial dataset
- Gathering preliminary results
- Running more iterations over larger datasets
- Result Evaluation
- Drawing Conclusions and writing

Next Year Planning

- Review the state of Art
- Develop the first prototype of our ILMS
- Run the system over a selected dataset as follows: Download the latest 100 tweets of every participating learner. The tweets of every learner are considered a separate cluster. The two 'nearest' students are merged into a cluster. The process continues to join a student with another, a student with a cluster, or a cluster with another, until all students form one cluster
- Gather preliminary results

Review → Develop → Run → Preliminary results
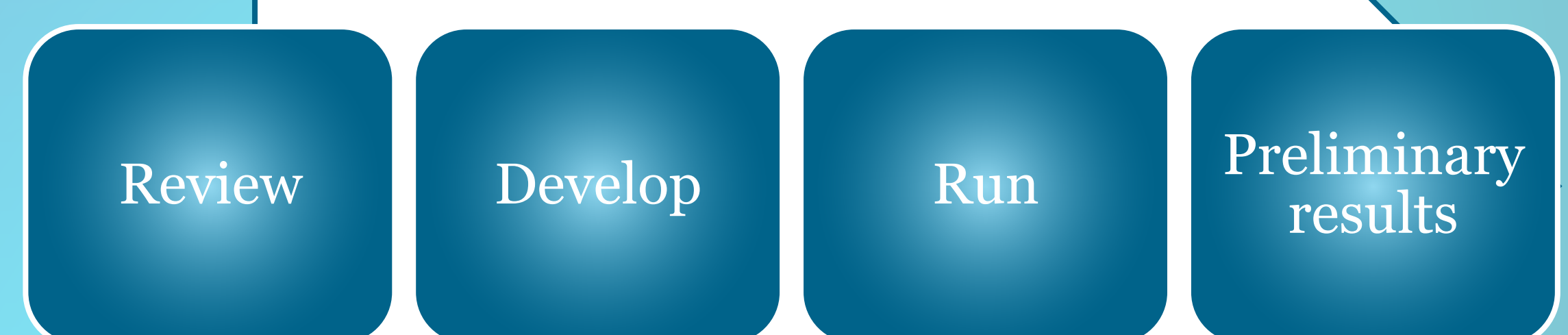
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