Context of the Ph.D. research

During the past decades, numerous research and heritage institutions have taken the initiative to digitize their collections. This has led to a significant increase in the development and application of artificial intelligence (AI) techniques. This Ph.D. research focuses on the efficient use of AI and computer vision for creating and analyzing various types of digital archives.

Photo archives are processed by automatically recognizing relevant people and objects. Subsequently, the research describes methods for the geolocation and segmentation of topographical maps. Furthermore, herbaria are processed, focusing on optimizing the digitization, preprocessing, annotation, segmentation, and analysis. Lastly, techniques for geolocating and analyzing social media are discussed.

The results demonstrate how AI and data-driven methods are valuable for creating, analyzing, and managing digital archives. These methods lead to notable time and cost reductions and enrich the collections with additional metadata, significantly improving their accessibility and searchability.

Curriculum Vitae

Kenzo Milleville was born in 1995. In 2018, he received his master's degree in Electronics and ICT Engineering Technology at Ghent University. After graduation, he started his PhD at research groups IDLab & CartoGIS, under the supervision of professors Steven Verstockt and Nico Van de Weghe.

Since high school, Kenzo has been fascinated by artificial intelligence. His research therefore focused on efficiently applying such methods in cultural heritage and geo domains, where limited labeled data is available. Throughout his research, he has worked on a multitude of research projects, in which he successfully developed and applied AI-based methods to enrich and analyze digital archives.

Kenzo has co-authored 17 publications, three of which were first-author publications in A1 journals. He presented at 11 conferences and workshops and supervised 16 master thesis students. He also assisted in various courses taught at Ghent University.

FACULTY OF ENGINEERING AND ARCHITECTURE

You are kindly invited to the public defense of

Kenzo Milleville

The defense will take place on
Wednesday 20 December 2023
16:30

In

iGent, Auditorium 1 (First floor),
Technologiepark-Zwijnaarde 126
9052 Ghent

The reception will follow the presentation at the Foyer in iGent (12th Floor)

Please confirm your presence before 10 December via this form

GHENT UNIVERSITY

Promotors

Prof. Steven Verstockt
IDLab, Ghent University – Imec

Prof. Nico Van de Weghe
CartoGIS, Ghent University

Members of Ph.D. Committee

Chair:
Prof. Patrick De Baets
Dean of the Faculty of Engineering and Architecture, Ghent University

Jury board:
Prof. Dieter De Witte
IDLab, Ghent University

Prof. Haosheng Huang
CartoGIS, Ghent University

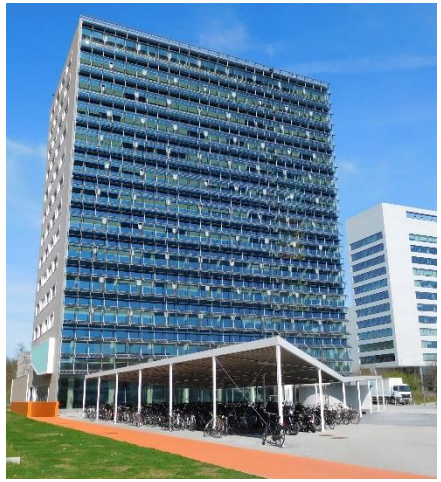
Prof. Aleksandra Pizurica
GAIM, Ghent University

Prof. Thomas Smits
Digital History & AI, University of Amsterdam

Prof. Christophe Verbruggen
Director of GhentCDH, Ghent University

Venue

iGent, Auditorium 1
(First Floor)
Technologiepark-Zwijnaarde 126,
9052 Ghent



Directions to iGent

Attend the public defense online via
Microsoft Teams

FACULTY OF ENGINEERING AND ARCHITECTURE

Invitation to the public defense of

Kenzo Milleville

Unlocking the Potential of Digital Archives via Artificial Intelligence

GHENT UNIVERSITY