



CitiLink

Enhancing municipal transparency and citizen engagement through AI: from unstructured to structured data



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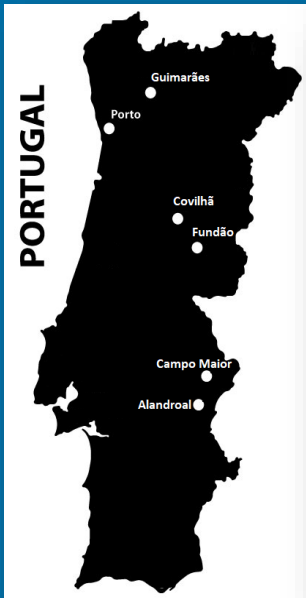
<http://citilink.inesctec.pt>

# CitiLink - Motivation

As local government in Portugal nears its 50th anniversary, **voter abstention** reached 40% in the latest local elections, highlighting the **urgent need** for initiatives that **strengthen civic participation and transparency**.

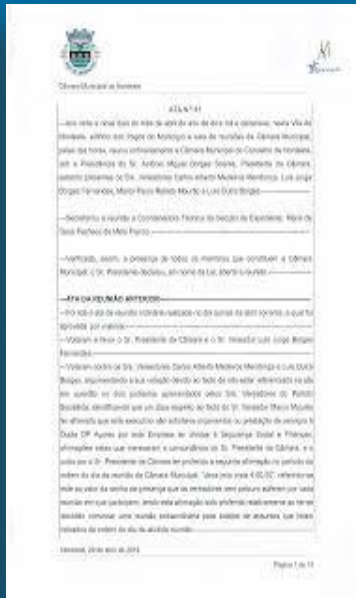
CitiLink is a **10-month research project** (to be concluded on **Jan-2026**) that aims to help reduce this gap by developing **AI models** to transform **public meeting minutes** into structured, accessible information, thus approximating citizens to local government decisions.

This involved a collaboration with **6 municipal councils** which provided us with **4 years of meeting minutes**.



**PORTUGAL**

Guimarães  
Porto  
Covilhã  
Fundão  
Campo Maior  
Alandroal



Alandroal, cm\_002\_2023-01-18

ATA N.º 02  
REUNIÃO ORDINÁRIA 18/01/2023  
CÂMARA MUNICIPAL DE ALANDROAL  
o Edifício Sede do Município de Alandroal, o Senhor Presidente da Câmara Municipal, João Maria Aranha Grilo, declarou aberta a reunião, eram 10.45 horas

**Metadata**

minute\_number: "2" meeting\_type: "ORDINÁRIA"  
date: "18/01/2023" participants: "João Maria Aranha Grilo..."  
begin\_time: "10.45 horas" end\_time: "11.10 horas"  
location: "o Edifício Sede do Município de Alandroal"

**2. RATIFICAÇÕES ORÇAMENTAIS**

Ponderado e analisado o assunto o Executivo Municipal deliberou por unanimidade ratificar as alterações orçamentais.

**Agenda Item**

Item\_title: "2. RATIFICAÇÕES ORÇAMENTAIS"


**Subject of Discussion**

subject\_of\_discussion: "alterações orçamentais"  
topic: "General Administration..."  
theme: "Alterações orçamentais"


voting\_evidence: "deliberou"  
voters: "o Executivo Municipal"  
global\_tally: "por unanimidade"

...o Senhor Presidente da Câmara Municipal deu por encerrada esta reunião. Eram 11.10 horas.


## CitiLink-Minutes: A Multilayer Annotated Dataset of Municipal Meeting Minutes



**120 Portuguese municipal meeting minutes**




**6 City Councils**  
Alandroal, Campo Maior, Covilhã, Fundão, Guimarães, Porto



**Four annotation layers**

- Personal Information
- Metadata
- Subjects of Discussion
- Voting Information



**~31K annotations**

**20,375 entities**  
**11,163 relations**



# CitiLink - Models

Over the course of the project, we made available **8 AI models** to the research community and the **CitiLink demo**.

## 6 Municipalities



## Dataset Statistics

**120**  
Portuguese Municipal Meeting Minutes

- 20 docs per municipality
- 2021-2024 time period
- 1,016,825 tokens
- 20,375 entities
- 11,162 relations
- 24 text segments per doc
- 2,716 voting records
- ≈1.7 topics/discussion subject
- 2,848 hand-written summaries

## Boundary Detection Model



Opening Segment  
Body Segment  
Closing Segment  
Excluded Segments

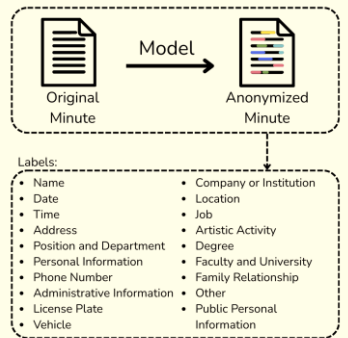
## Metadata Identification Model

- Session Info**
- Meeting number and type
  - Date
  - Local
- Participants**
- President
  - Councillors
- Timing**
- Start time
  - End time

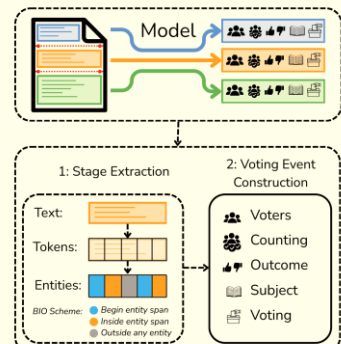
## Text Segmentation Model



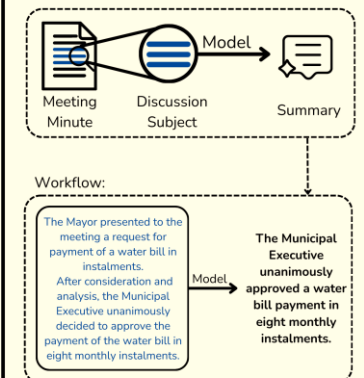
## Entity Anonymization Model



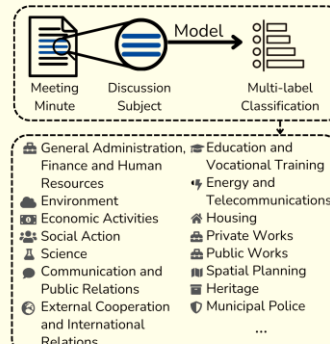
## Voting Identification Model



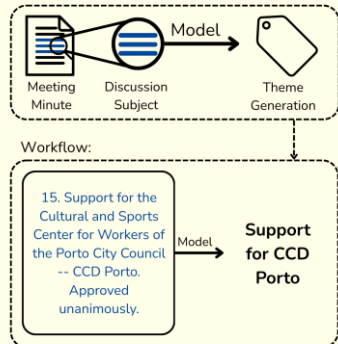
## Summarization Model



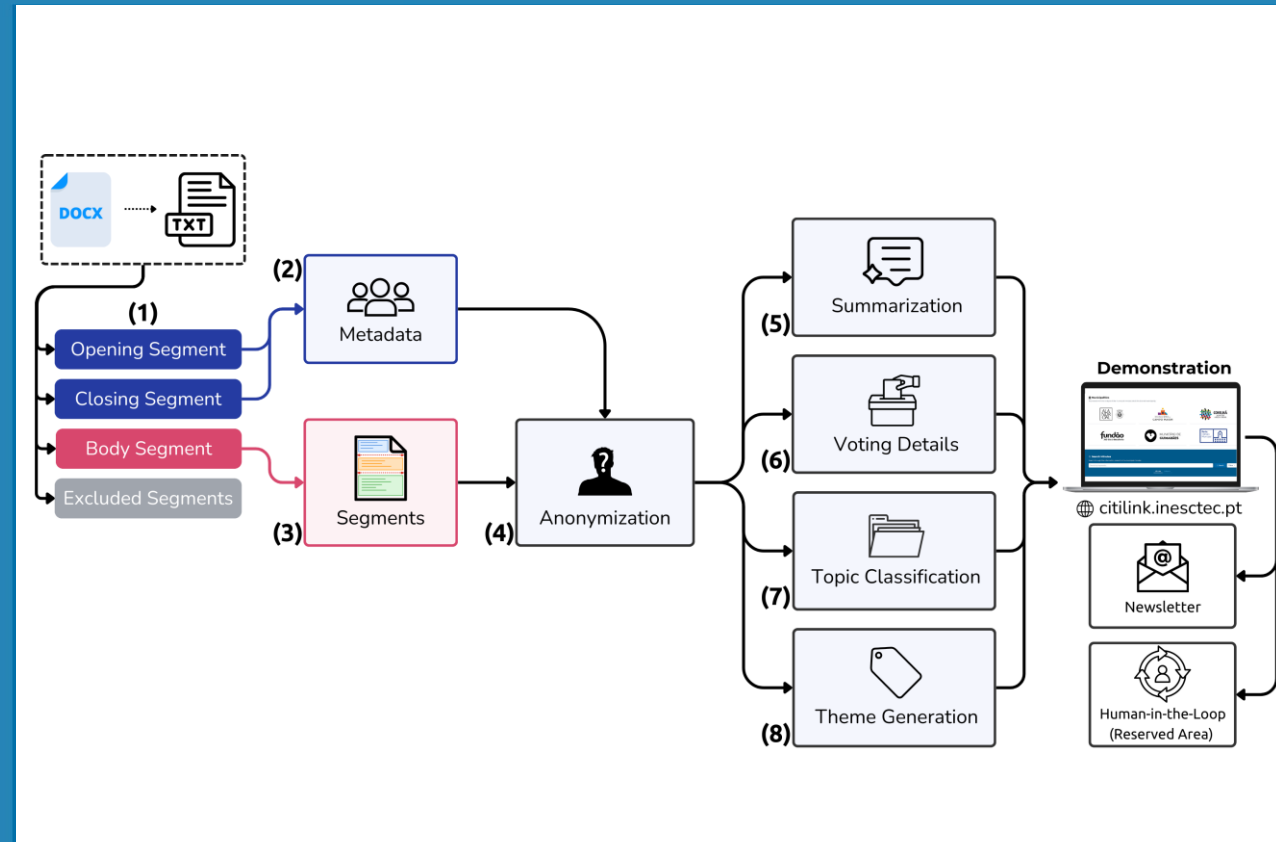
## Topic Classification Model



## Theme Generation Model



# CitiLink - Pipeline



[https://citilink.inesctec.pt/videos/teaser\\_en.mp4](https://citilink.inesctec.pt/videos/teaser_en.mp4)

# CitiLink - Demonstration

The screenshot displays the CitiLink web application interface. At the top, the navigation bar includes the CitiLink logo, a list of municipalities, a search bar, and links for media, about, notifications, language (Português), and video. The breadcrumb trail shows the path: Municipalities > Municipality of Covilhã > texto-definitivo-da-ata-no-212024.

The main content area is titled "FINAL TEXT OF MINUTE NO. 21/2024" and includes the location "Auditório Municipal da Covilhã, sito na Rua do Castelo" and the date "12/12/2024 (01:00 - 01:00)". Below this, there are tabs for "Summary" and "PDF". The summary text describes the Ordinary meeting of Covilhã City Council, detailing the approval of the rectification of the Lease Agreement between the Municipality of Covilhã and Domingos Grave, the Support Protocol between the Municipality of Covilhã and the AECBP, the Support Protocol between the Municipality of Covilhã and Académico dos Penedos Altos, and the Tripartite Collaboration Protocol between the Municipality of Covilhã, Geração GIVE and the Owner for the implementation and execution of the 'STARZIPLINE Project'.

The "Participants" section lists seven individuals with their photos, names, and roles:

- Vitor Manuel Pinheiro Pereira (Presidente, PS)
- José Armando Serra dos Reis (Councillor, PS)
- Pedro Miguel Santos Farromba (Vereador, CDS-PP/PSD)
- Ricardo Miguel Correia Leitão Ferreira da Silva (Vereador, CDS-PP/PSD)
- José Miguel Ribeiro Oliveira (Vereador, PS)
- Marta Maria Tomaz Gomes Morais Alçada Bom Jesus (Vereadora, CDS-PP/PSD)
- Maria Regina Gomes Gouveia (Vereadora, PS)

The "Voting Summary" section includes a "Topic Distribution" table and an "Overall Approval" summary.

Topic	Approved	Rejected	Total
General Administration	28	0	28
Public Works	21	0	21
Other information	11	3	14
Economic Activities	14	0	14

The "Overall Approval" summary shows 16 Subjects Approved and 0 Subjects Rejected.

[https://citilink.inesctec.pt/videos/demo\\_en.mp4](https://citilink.inesctec.pt/videos/demo_en.mp4)