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**Leveraging Unannotated Data with
Self - Supervised Learning for Continuous Recognition**

-

Application to French Belgian Sign Language

Project n°6

I 01

Context



Time →

I 01

Context



French Belgian Sign Language

I 01

Context



French Belgian Sign Language \Rightarrow DATA SCARCITY

I 01

Context



French Belgian Sign Language \Rightarrow DATA SCARCITY

☺ LSFB corpus

I 01

Context



French Belgian Sign Language \Rightarrow **DATA SCARCITY**

☺ LSFB corpus

1/3 ANNOTATED
(50h)

2/3 UNANNOTATED
(100h)

I 01

Context



French Belgian Sign Language \Rightarrow **DATA SCARCITY**

☺ LSF B corpus

1/3 ANNOTATED
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Problem? Fully-Supervised Learning requires annotated data

I 01

Context



French Belgian Sign Language \Rightarrow **DATA SCARCITY**

☺ LSF B corpus

1/3 ANNOTATED
(50h)

2/3 UNANNOTATED
(100h)

Problem? Fully-Supervised Learning requires annotated data

Solution? **SELF-SUPERVISED LEARNING** techniques

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01

Continuous Recognition

as evaluation task (visual recognition + temporal modeling)



Time →

SMALL

GROW/EXPAND

TO FORGET

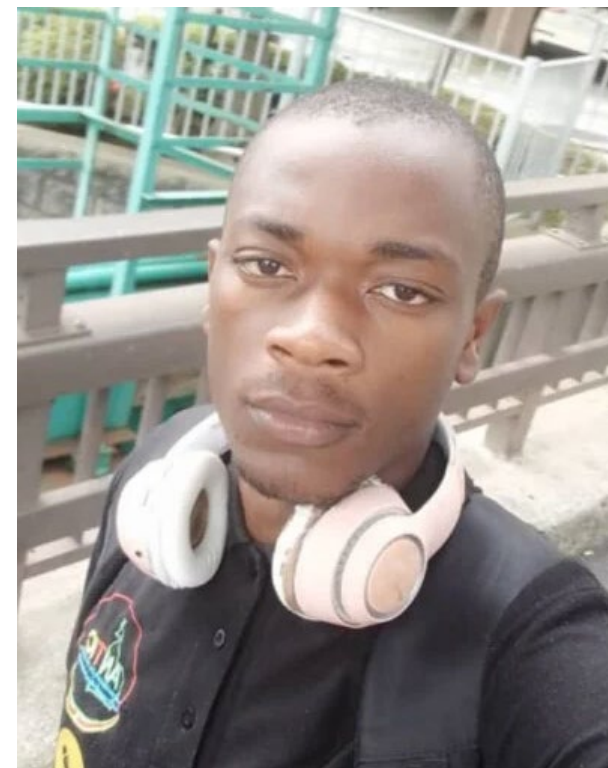
I02

Founding Team



Pierre Poitier
Team Leader

Sign Language Processing
& Computer Vision



Ariel Basso
Team Member

Sign Language Recognition
& Self-Supervised Learning



Adélaïde Couplet
Team Member

Sign Language Processing,
Linguistics & NLP



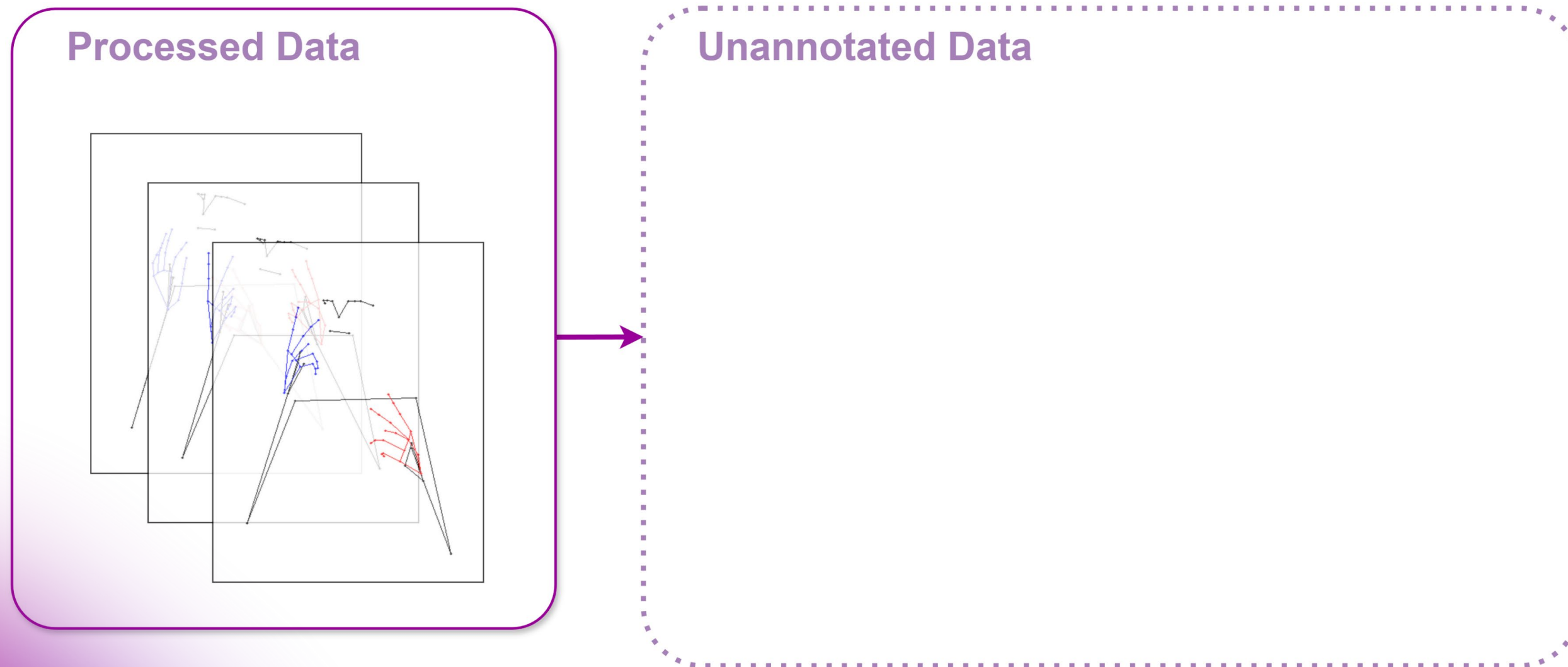
Elisa De Coster
Team Member

Model variability, XAI

Human-Centered Machine Learning Lab and **Namur Digital Institute**.

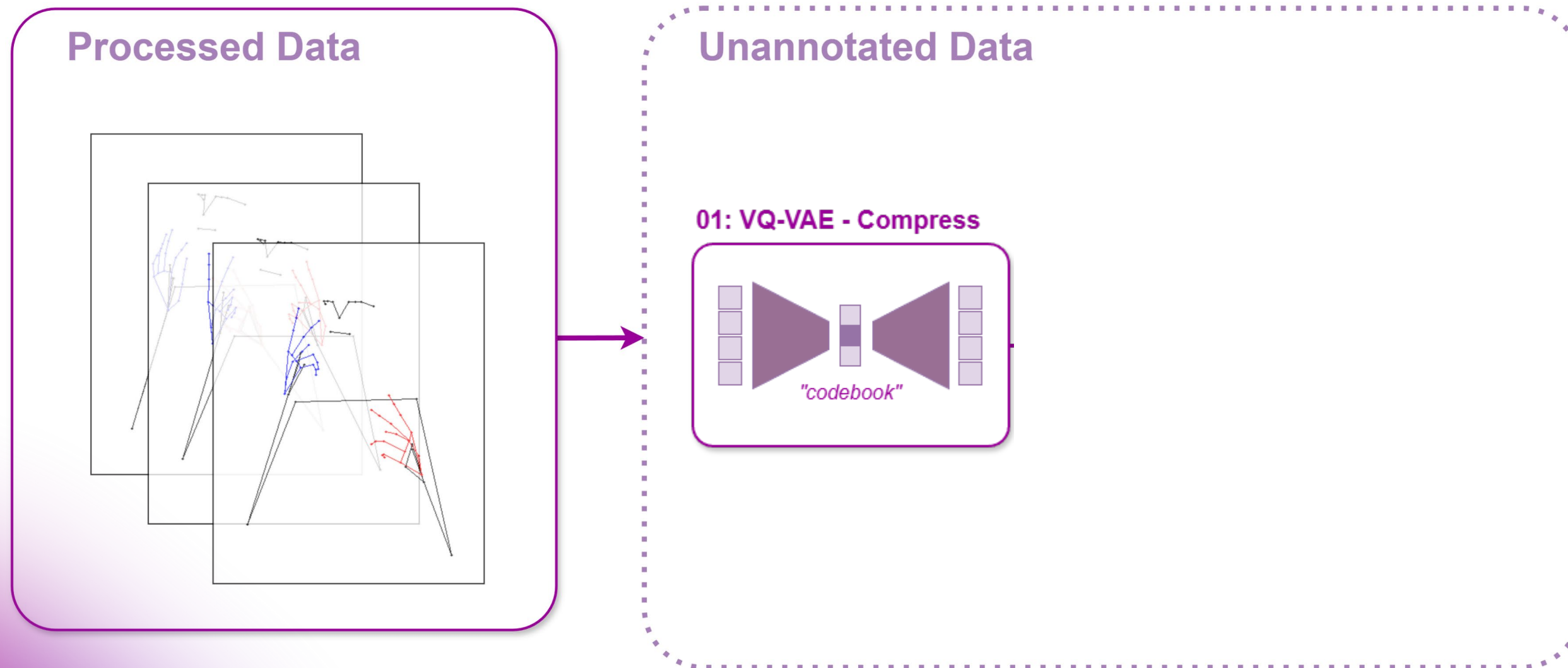
I03

Work Plan



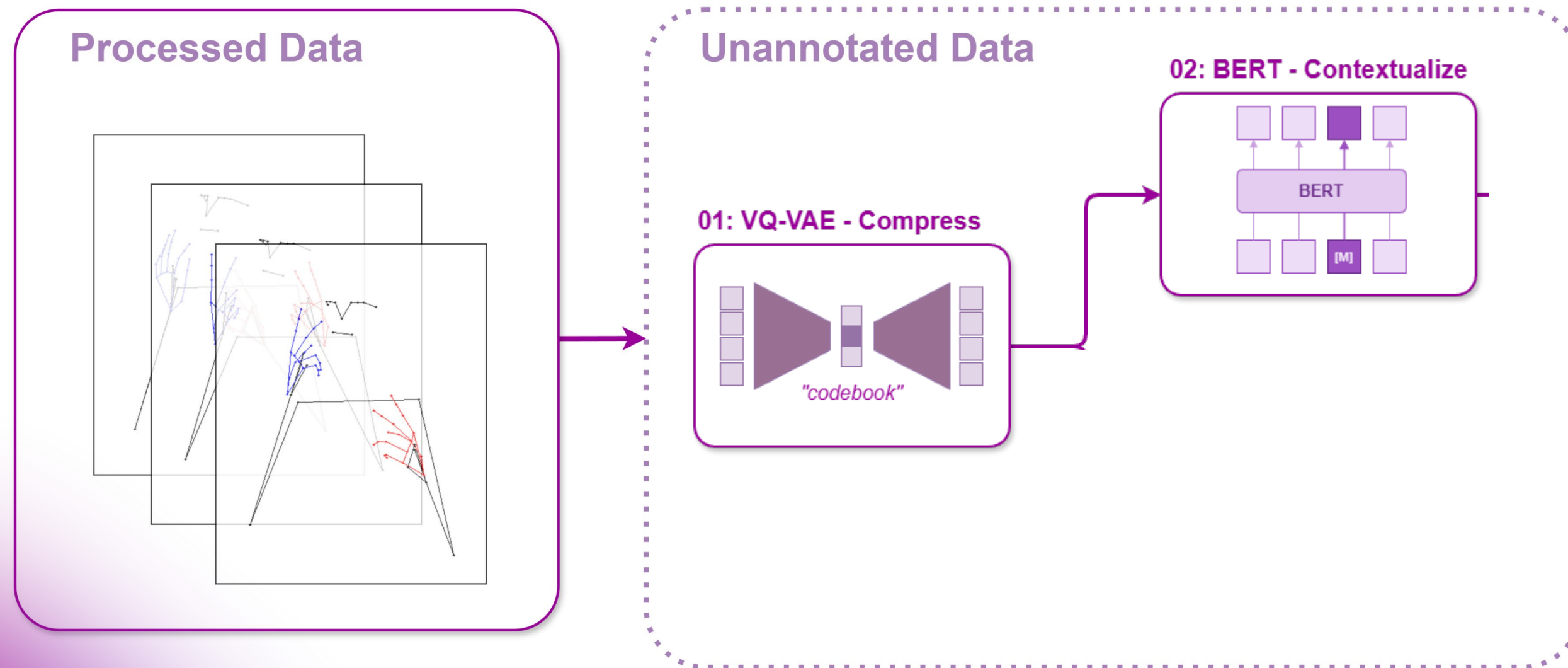
I03

Work Plan



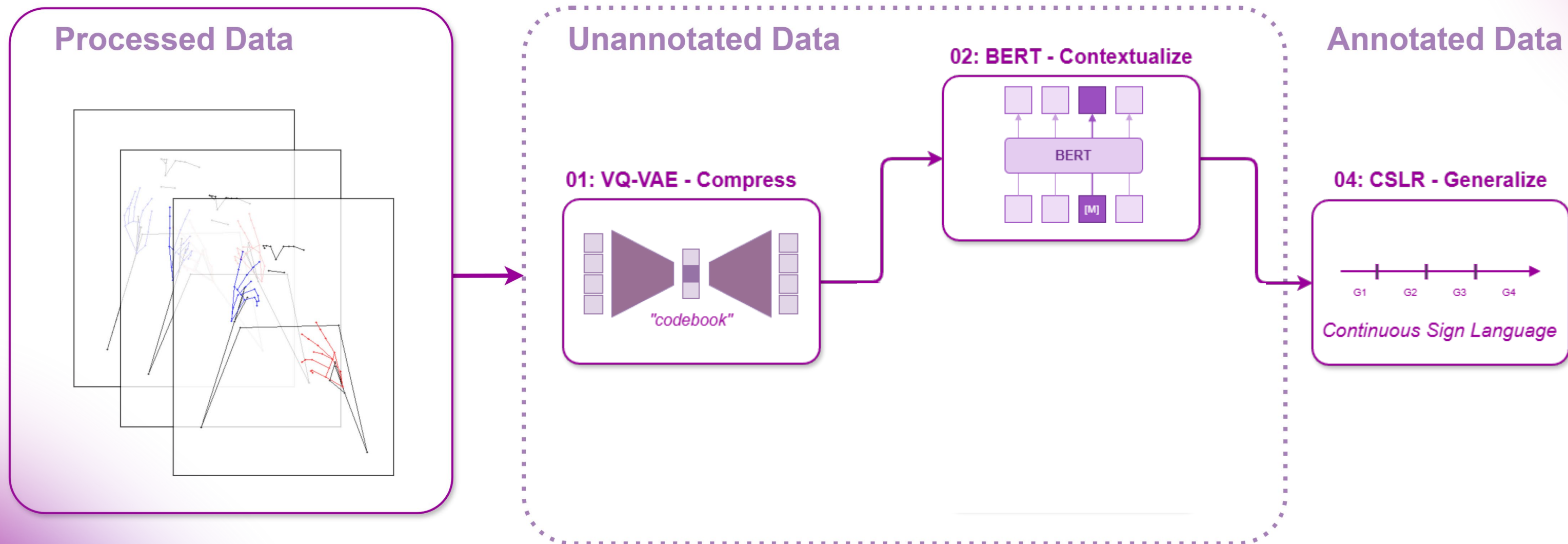
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Work Plan



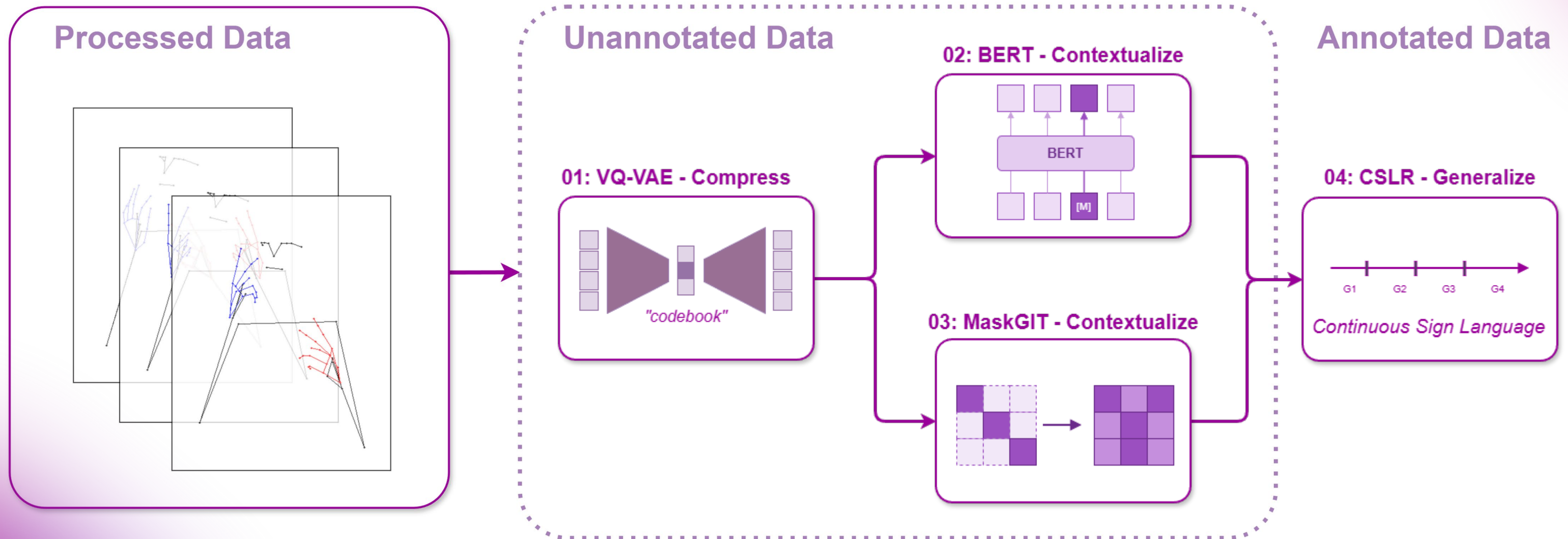
103

Work Plan



103

Work Plan

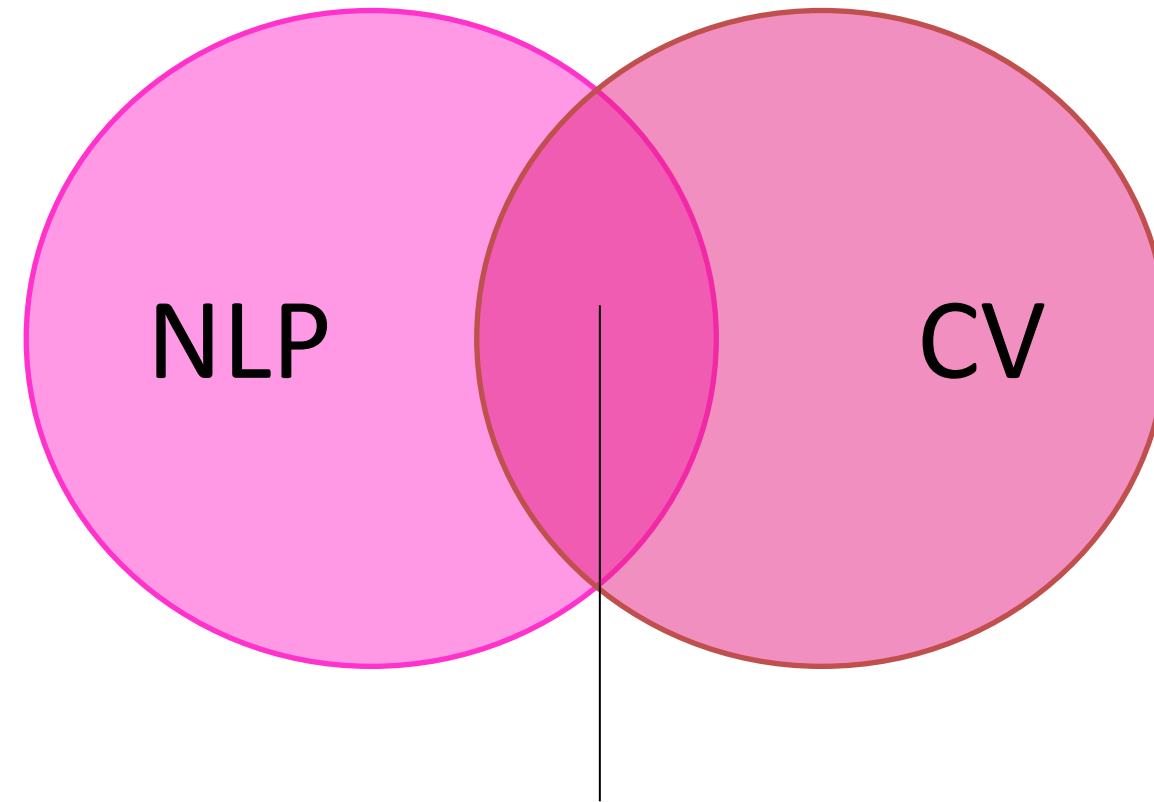


| 04

Expertise Sought



Highly Motivated



Our Project



Concrete & Useful

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THANK YOU FOR YOUR ATTENTION !

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