# Transliterate from Diagrams & Data

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# **Motivation & Approach**

## **Graphical Approach**

- Empower Linguist
- Encapsulate Development
- Code generated from multiple diagrams/files

#### **NNets**

- Reduce Dependencies
- Code from Data

"Universal" Strategy/Tools



# Strategy

#### **Transliteration Code Creation**

- Graphical Editing (lucidchart)
- Software Development on diagram nodes inclusion of mappings, code snippets, NLP libraries, ...
- Code generation from csv exports run test, tweaks & re-designs, etc, ...
- Transliteration

#### Train & Export NNets

- Generate transliteration data
- Train NNets & Export Onnx
- Run Ruby Prod. code



# Demo



## Resources

#### Links:

- ISO Farsi Demo
- QuickStart
- Paper

# **Summary & Outlook**

We have presented a diagram/data based solution and discussed its potential for transliteration.

Solutions/Diagrams could be easily shared. Code built from data for production.

### Potential Improvements/Usage:

- alternatives to lucidchart or plugin
- templates for Linguists to use

# **Discussion / Questions**

We are open to suggestions and feedbacks!

#### **■** CODE,

https://github.com/interscript/ transliteration-learner-from-graphs/blob/main/ docs/article.pdf

