Idea: Intelligent highlighter
Manual interaction: intuitive, imprecise
Automatic: precise outlines
DIVA-HisDB
A Precisely Annotated Large Dataset of Challenging Medieval Manuscripts

F. Simistira, M. Seuret, N. Eichenberger, A. Garz, M. Liwicki and R. Ingold

(a) St. Gallen, Stiftsbibliothek, Cod. Sang. 18, (CSG18), Latin, 10th cent.
(b) St. Gallen, Stiftsbibliothek, Cod. Sang. 863 (CSG863), Latin, 11th cent.
(c) Cologny-Geneve, Fondation Martin Bodmer, Cod. Bodmer 55 (CB55), Italian/Latin glosses, 14th cent.
Extracting Maya Glyphs from Degraded Ancient Documents via Image Segmentation

Rui Hu, Jean-Marc Odobez, Daniel Gatica-Perez
{rhu,odobez,gatica}@idiap.ch
Indexing Maya Hieroglyphs with Neural Codes

Edgar Roman-Rangel and Stephane Marchand-Maillet

Glyph-blocks  Autoencoders  Local descriptors
Segmenting Ancient Maya Glyphs via Crowdsourcing

Gulcan Can, Jean-Marc Odobez, Daniel Gatica-Perez
Idiap Research Institute, EPFL

- Building a large-scale glyph dataset for visual analysis
- Assessing the similarity of codical glyphs to category variants
- Studying crowd behavior
Convolutional Neural Network for Document Image Analysis

No boring complicated formula 😊

Some applications in the poster
DIVAServices: RESTFul Web Services for Document Image Analysis methods

- Run computations in the cloud
- Computer Scientists
  - Provide Methods
  - Receive insights
- End Users
  - Easier Access
  - No local installation
  - DIVAServices-Spotlight for small experiments
Objective: Splitting a historical document image into regions of interest.

Methodology

- Unsupervised feature learning with Autoencoders (Chen et al. ICDAR 2015).
- Structured modeling with Probabilistic Graphical Models (Chen et al. ICFHR 2016).
- Performance increasing with superpixels algorithm (Chen et al. DAS 2016).