# HIP 2019 - Historical Document Imaging and Processing

The 5th International Workshop on **Historical Document Imaging and Processing (HIP 2019)** will be held in conjunction with ICDAR2019 International Conference on Document Analysis and Recognition, on September 21, 2019 in Sydney, Australia.

The manifold topics addressed in this workshop encompass the entire processing chain from image acquisition to information extraction. We include the growing importance of machine learning in this processing chain, such as convolutional and recurrent neural networks, and we also encourage the presentation of entire projects in the context of historical documents.

The workshop brings together researchers working with historical documents and is intended to be complementary and synergistic to the work in analysis and recognition featured in the main sessions of ICDAR, the premier international forum for researchers and practitioners in the document analysis community.

HIP 2019 Workshop: <a href="https://www.primaresearch.org/hip2019/">https://www.primaresearch.org/hip2019/</a>

ICDAR 2019: http://icdar2019.org/



Important Dates for HIP 2019 Call for Papers

Paper submission deadline: 01 June 2019
Acceptance notification: 15 July 2019

Camera ready: 01 August 2019Workshop: 20-21 September 2019

# HIP 2019 Workshop Call for Papers

Workshop topics include (but are not limited too):

Imaging and Image Acquisition

- Imaging for fragile materials
- Multispectral imaging
- Camera-based/non-invasive acquisition
- Case studies/applications

## **Digital Archiving Considerations**

- Compression issues
- Measuring essential resolution (color, spatial) and metadata
- Modeling of document image degradation
- Historical Collections
- Military records, personal journals, church records, medieval manuscripts, etc.

- Scientific, technical and educational documents
- Government archives, documents from the world cultural heritage, multi-language

#### Document Restoration/Improving readability

- Removing or minimizing damages, defects, ink-bleed
- Completing and filling in missing pieces based on context, prior knowledge, supporting documents, i.e. inpainting, etc.
- Machine-learning algorithms for enhancement based on example images
- Interactive tools from a user viewpoint
- Learning from user-directed image enhancement

#### Content Extraction (within the context of historical documents)

- Content-based retrieval
- Automated or semi-automated transcription / processing
- Crowdsourcing, user interfaces
- Machine-learning algorithms for content extraction, convolutional and recurrent neural networks, auto-encoders, unsupervised feature learning
- Content recognition based on surrounding and supporting context
- Ontologies for modeling historical document content

#### Family History Documents and Genealogies

- Personal, Family, National and Historical Collections of Family Genealogy and Histories
- Extracting and linking names, dates, places, etc.
- Extracting, linking and piecing together personal and family histories and narratives
- Discovering historical social networks

### Automated Classification, Grouping and Hyperlinking of Historical Documents

- Style identification (typography of printed text, handwriting style recognition for manuscript authentication, dating or author identification...)
- On-line & web-based navigation within/among document images
- Searching/querying, retrieval, summarizing/condensing of document images, large-scale databases
- Document clustering, collecting, linking, analysis and search technologies
- Parallel tagging of images, transcripts, and other document layers