What was your favorite HIP location so far?

- Beijing (HIP'11): 10%
- Washington (HIP'13): 6%
- Nancy (HIP'15): 3%
- Kyoto (HIP'17): 22%
- Sydney (HIP'19): 59%
For how long have you been active in OCR/DIA research?

- Less than 5 years: 50
- 5–10 years: 15
- More than 10 years: 10
What would be your dream in OCR/DIA come true?
Can you think of other/more scalable means and metrics to evaluate quality of methods than using ground truth?

<table>
<thead>
<tr>
<th>Real users</th>
<th>grad-student slaves</th>
<th>User satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>User studies</td>
<td>text line reconstruction</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
<td>Usability</td>
</tr>
</tbody>
</table>
Can you think of other/more scalable means and metrics to evaluate quality of methods than using ground truth?

<table>
<thead>
<tr>
<th>Option</th>
<th>Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>no</td>
<td>Mechanical turks</td>
</tr>
<tr>
<td>Nah</td>
<td>Heuristics</td>
</tr>
<tr>
<td>Real users</td>
<td>Robot to robot communication</td>
</tr>
<tr>
<td></td>
<td>Common sense</td>
</tr>
<tr>
<td></td>
<td>User involvement</td>
</tr>
<tr>
<td></td>
<td>goal-oriented evaluation</td>
</tr>
</tbody>
</table>
Can you think of other/more scalable means and metrics to evaluate quality of methods than using ground truth?

- References to the transcriptions
- Hermeneutics
  - end-to-end bleu scores with MT
- You can't
  - Real users
  - let users believe it works
- weather forecast
  - No
  - perplexity
Can you think of other/more scalable means and metrics to evaluate quality of methods than using ground truth?

Yes  P  user satisfaction

No  No  Both are equally important
Do you think general models will become good enough for multiple tasks or separate models need to be trained for specific challenges?

- One model to rule them all: 17
- Specific models can be more tailored: 44
- Can't/Won't say: 7
With the advent of deep learning, do you think that datasets will become more important than methods?

- yes
- sure
- probably

- yes
- yes
- Hope no

- Of course
- They already are
- No
With the advent of deep learning, do you think that datasets will become more important than methods?

- Yes
- Yes
- Yes
- Yes
- Yes
- Yes
- of course
- Yup
- Yes
- They should not!
- No
With the advent of deep learning, do you think that datasets will become more important than methods?

<table>
<thead>
<tr>
<th>You need both now</th>
<th>No</th>
<th>yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Beer will become more important</td>
<td>yes</td>
<td>GOOD datasets (real)</td>
</tr>
</tbody>
</table>
With the advent of deep learning, do you think that datasets will become more important than methods?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>Yes partially</th>
</tr>
</thead>
<tbody>
<tr>
<td>mainly - unfortunately</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jein</td>
<td>Equal</td>
<td>yes - good quality data</td>
</tr>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>yes</td>
</tr>
<tr>
<td>Choice</td>
<td>Answer</td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>--------</td>
<td></td>
</tr>
<tr>
<td>Equal</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Push science forward</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Hope no. Need a mix of how to apply DL methods.</td>
<td>Probably</td>
<td></td>
</tr>
<tr>
<td>Methods are based on datasets</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>
With the advent of deep learning, do you think that datasets will become more important than methods?

<table>
<thead>
<tr>
<th>Option</th>
<th>Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>More detailed datasets</td>
</tr>
<tr>
<td>Until methods can make good use of auto labeled data</td>
<td>Both are equally important</td>
</tr>
<tr>
<td>Complex background</td>
<td>Tables</td>
</tr>
<tr>
<td></td>
<td>Binarization and segmentation</td>
</tr>
<tr>
<td></td>
<td>Bee-newspapers</td>
</tr>
</tbody>
</table>
With the advent of deep learning, do you think that datasets will become more important than methods?

- named entity recognition
- tables
- key-value
- Layout analysis should be joint with recognition (and more beer, yes!)
- reading order
- Newspapers
- Dealing with the large size of input
- Newspaper
- Newspaper
With the advent of deep learning, do you think that datasets will become more important than methods?

- Joint detection/recognition
- no binarization
- Newspapers

- NER
- Ground truth
- Complex background

- Medical data
- forms
What is the most relevant unsolved challenge in layout analysis according to your opinion?

- Ground truth
- Unsupervised learning
- Forms
- Tables
- Data
- Reading order
- Tabular data
- Binarization
- Semantic allocation
- Different types of text
- Logical layout
- Interlinear marginalia
- Interlinear glossaries
- Speed
- Table analysis
- Multidirectional segmentation
- Anything that isn't Latin
- Numerical and structured forms
- Varying text size
- Alignment with ground truth
- Tables without lines
- Oriented text
- Line detection
- Table
- Image-text with subclass
- Defining goal
- NER
- Handwritten forms
- Text instances
- Overlapping text instance
- Spatial relationships
- Marginally glossaries
- Boustrophedon
- Historical
- Mix language
- Large input size
- Complex background
- Neural networks
- Deep learning
- Coherent annotations
- Defining cost for deep neural networks
- Web writing systems
- Degradation
- Archive stamps
- Multiple scripts
- Math recognition
- Understanding
- Image and text recognition
- Generalization
- Overlapping text
- Number recognition
- Old map
- Spatial
- Boustrophedon
- Historical
In 5 years from today, will we still use binarization?

- Yes: 30
- No: 34
- Don't know: 6

Total respondents: 70
Which language(s)/script(s) are not sufficiently represented in current OCR/DIA research?
Have you used crowdsourcing and what for (or what can you think of using it for)?

- No
- Captchas
- no
- Yeah. User evaluation
- Tables
- Ground truthing
- Labeling
- no it might be useful
- Not yet.
Have you used crowdsourcing and what for (or what can you think of using it for)?

- **data labeling**
  - To tag data
  - Corrections

- **Labelling**
  - No
  - building larger "real" datasets

- **No**
  - Yes - correcting OCR errors
  - receipts
Have you used crowdsourcing and what for (or what can you think of using it for)?

<table>
<thead>
<tr>
<th>Yes</th>
<th>Htc</th>
<th>dataset</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, annotation and teaching</td>
<td>To annotate whatever data</td>
<td>quality control</td>
</tr>
<tr>
<td>Labelling</td>
<td>Truth data collection</td>
<td>GT generation, post-correction</td>
</tr>
</tbody>
</table>
Have you used crowsourcing and what for (or what can you think of using it for)?

<table>
<thead>
<tr>
<th>Labeling</th>
<th>No. Segmentation</th>
<th>Human ocr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrections</td>
<td>Labeling</td>
<td>Segmentation</td>
</tr>
<tr>
<td>FamilySearch Indexing</td>
<td>crowsourcing?</td>
<td>Text Localization and Transcription annotation</td>
</tr>
</tbody>
</table>
Have you used crowdsourcing and what for (or what can you think of using it for)?

<table>
<thead>
<tr>
<th>Verification</th>
<th>Good idea. Let's work on logistics.</th>
<th>Generate noisy labels</th>
</tr>
</thead>
<tbody>
<tr>
<td>No, but Ground truth</td>
<td>Human ocr</td>
<td>No</td>
</tr>
<tr>
<td>Corrections / labeling</td>
<td>Labelling</td>
<td>annotations</td>
</tr>
<tr>
<td>Handwritten Dataset</td>
<td>Labelling</td>
<td>Data Collection</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------</td>
<td>----------------</td>
</tr>
<tr>
<td>No, because sensitive data</td>
<td>No</td>
<td>Dataset collection</td>
</tr>
<tr>
<td>Evaluate human-eye accuracy</td>
<td></td>
<td>Music annotation</td>
</tr>
</tbody>
</table>
Have you used crowdsourcing and what for (or what can you think of using it for)?

- Labeling
- Crows are pretty smart
- evaluation
- Crowbars
- OCR results verification
- Parliament of crows?
- htr
- Correcting auto labeled data
- Quality Control
Have you used crowdsourcing and what for (or what can you think of using it for)?

- Real time video coding
- Math GT production
- It’s actually a murder of crows.

- reducing the rodent population
To open source or not open source?

- Only open source is transparent and reproducible: 53
- Does not matter if performance is better: 12
- No opinion: 6

Total responses: 71
Anything that you would like to add?

- Lunch
- Thank you
- Lunch
- share databases!!
- More seats
- No
- We need beer in coffee break
- High res images
- Tables
Anything that you would like to add?

- Anybody know a good restaurant nearby?
- More seats and lunch
- Open data > open source

- More crow puns. Crow-CR anyone?
- Lunch
- Not all questions were yes/no. Many had caveats.

- Gather available datasets in one platform
- Free lunch
- Lunch
<table>
<thead>
<tr>
<th>Anything that you would like to add?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where is my backpack?</td>
</tr>
<tr>
<td>Where to go for lunch?</td>
</tr>
<tr>
<td>Proceedings</td>
</tr>
<tr>
<td>share presentations</td>
</tr>
<tr>
<td>More crows!</td>
</tr>
<tr>
<td>business models</td>
</tr>
<tr>
<td>Open models (as well as open data and open source)</td>
</tr>
<tr>
<td>Interesting discussion</td>
</tr>
<tr>
<td>more convenient room</td>
</tr>
</tbody>
</table>
Anything that you would like to add?

- Datasets sharing
- More crows
- I hear that laksa is a tasty Sydney favorite
-oganized per year
- Replace icdar with hip
-Hip conference every year
-More beer!
-No more binarization!!
-Crow-pen Source?
Anything that you would like to add?

- Rugby Championship
- More applications
- I had a crow named Crocro

- Rugby
- slides sharing
- Hip hip hooray for HIP

- End of binarization
- collect slides in one place
- product
Anything that you would like to add?

- A crow took your backpack!
- More r&d