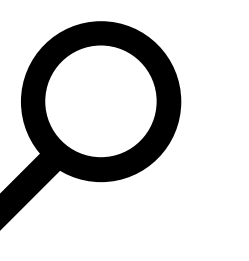


Luandri: A Clean Lua Interface to the Indri Search Engine



Bhaskar Mitra
Microsoft, UCL
Cambridge, UK
bmitra@microsoft.com

Fernando Diaz
Spotify
New York, USA
diazf@acm.org

Nick Craswell
Microsoft
Redmond, USA
nickcr@microsoft.com

Summary

Introducing **Luandri** (pronounced "*laundry*"), a simple interface that allows **Torch deep learning models** implemented using the **Lua scripting language** to access the retrieval capabilities of the **C++ based Indri search engine**.

Use Cases

- Candidate set generation for evaluating neural re-ranking models
- Sampling negative candidates for supervised training of neural ranking models
- Retrieval for training neural models under reinforcement or adversarial learning settings
- For generating training data for learning query-specific text representations
- Retrieval as a component of larger machine learning systems for solving complex tasks, e.g., knowledge-grounded conversational models

```
local luandri = paths.dofile('luandri.lua')
local query_environment = QueryEnvironment()
query_environment:addIndex("path_to_index_file")

local request = {
    query = '#syn(#od1(neural networks) #od1(deep learning))
#greater(year 2009)',
    resultsRequested = 10
}

local results = query_environment:runQuery(request).results

for k, v in pairs(results) do
    print(v.docid..'\\n'..v.documentName..'\\n'..v.snippet..'\\n')
End
```

Get the code:

<https://github.com/bmitra-msft/Luandri>

Other announcements related to neural information retrieval...

Under Review

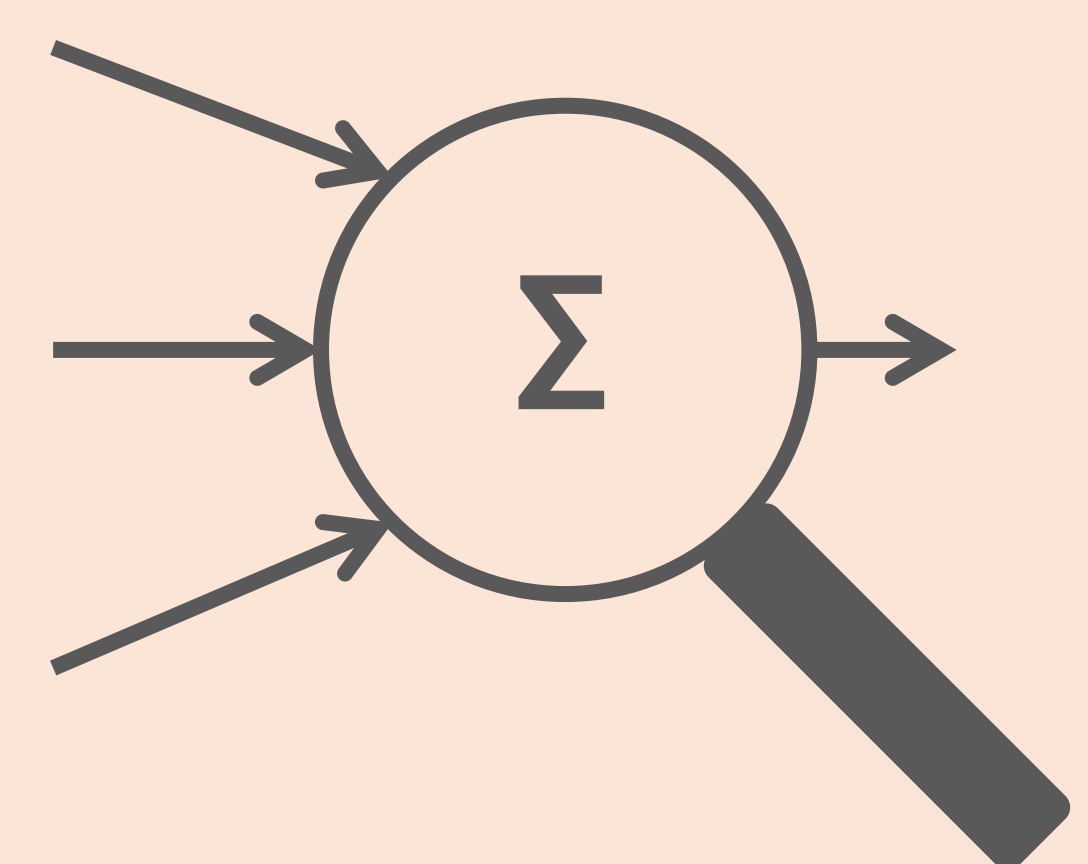
An Introduction to Neural Information Retrieval

Bhaskar Mitra
Microsoft, UCL

Nick Craswell
Microsoft

<http://bit.ly/neuralir-intro>

Foundations and Trends® in Information Retrieval (2017)



Neu-IR'17

SIGIR 2017 Workshop on
Neural Information Retrieval
August 11, 2017

<http://neu-ir.weebly.com/>