

# AKSW Colloquium

PhD progress & CubeQA

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# Section 1

PhD progress

February 2015–March 2016

# Thesis Core Progress

LinkedSpending	✓
QA Survey	revising
CubeQA Short	✓
CubeQA Long	revising
CubeQA Journal	future work
ProcQA(?)	future work

# Thesis Core Progress

LinkedSpending	✓	
QA Survey	revising	April 14
CubeQA Short	✓	
CubeQA Long	revising	April 30
CubeQA Journal	future work	2016
ProcQA(?)	future work	2016

# 2015–now Authorship (Published & Pending)

## First Author

- ▶ QA Survey
- ▶ CubeQA long

## Coauthor

- ▶ kOre
- ▶ AskNow
- ▶ \*path

# 2015–now Other Work

- ▶ Supervisor for Software Engineering Student Internship “Interactive Budget Calculator for the City of Leipzig”
- ▶ Creation of QALD 6 Task 3 Benchmark (QA on RDF Data Cubes)
- ▶ GeoKnow service administration (Website, Wiki, Blog)
- ▶ GeoKnow documentation
- ▶ Reviews for KESW, SWJ, . . .
- ▶ aksw.org Website Data Officer MOLE

# 2015–now

## What went well

- ▶ QA Survey (thanks for all the help!)
- ▶ Coauthorships
- ▶ Other Work

## What didn't

- ▶ publication of CubeQA long version

# Lessons Learned

- ▶ focus on formalization
- ▶ get more authors on board early to combine strenghts and offset weaknesses
- ▶ projects need promotion to become noticed



## Section 2

### CubeQA

# CubeQA

- ▶ Question Answering on RDF Data Cubes
- ▶ New research sub-field
- ▶ CubeQA project: Question Corpus, Benchmarks, TCQA algorithm
- ▶ Short Paper Preprint  
<http://svn.aksw.org/papers/2014/cubeqa/short/public.pdf>
- ▶ Long Paper (rejected, revising)  
[http://svn.aksw.org/papers/2016/IJCAI\\_cubeqa/submission.pdf](http://svn.aksw.org/papers/2016/IJCAI_cubeqa/submission.pdf)

# CubeQA

- ▶ Question Corpus: realistic statistical questions from volunteers
- ▶ Benchmarks
  - ▶ single-dataset
  - ▶ choice-among-many-datasets, now QALD 6 Task 3 (current evaluation)
  - ▶ combination-among-many-datasets (in progress)
  - ▶ hard challenges: implied aggregations, subqueries,
- ▶ TCQA: Tree-based Cube Question Answering, first algorithm that can answer these Questions
- ▶  $F_1 \approx 0.4$  on QALD 6 Task 3 train

# Problems of CubeQA

- ▶ long version of CubeQA not published yet
- ▶ new research sub-field, needs groundwork
  - ▶ needs to solve too many things at once, lack of focus
  - ▶ tension between completeness and understandability
- ▶  $F_1 = 0.4$  not deemed high enough (even though only CubeQA can do it at all)
- ▶ formalization

# CubeQA Paper Current State

[http://svn.aksw.org/papers/2016/IJCAI\\_cubeqa/submission.pdf](http://svn.aksw.org/papers/2016/IJCAI_cubeqa/submission.pdf)