# Chunliang Lyu

https://chunlianglyu.com hi@chunlianglyu.com +852-54943678

#### **EDUCATION**

#### **▼** The Chinese University of Hong Kong, Ph.D. in Text Mining

08/2011 - 01/2016

- Research Focus: Text Mining, Information Retrieval, Knowledge Graph.
- Thesis: Discovery and Search Entities in Text

▶ National Taiwan University of Science and Technology, Visiting Student

01/2011 - 06/2011

▶ Beijing Institute of Technology, B.S., Information Engineering, GPA 3.9

09/2007 - 06/2011

# **PROJECTS**

# ▼ Entity Discovery and Retrieval System, Principle Researcher 2012-2015

- Proposed a CRF-based distantly supervised method to automatically discover entities from semi-structured webpages, and then construct a positional language modeling for the entity based on the webpage structure. Published in CIKM 2013.
- Proposed a factoid entity retrieval system based on factor graph. Significantly improved the performance on the entity retrieval task over the state-of-the-art methods. Published in ACL 2015.

#### **▼ HyperLab, Co-founder** 2014-now

- A platform that provides a central entry point for managing personal information across multiple online services.
- Integrated 13 online services, including cloud storage services like Dropbox, social services like Facebook, note keeping services like Evernote.
- Designed and implemented the overall system in Python 3, including PostgreSQL as the database, ElasticSearch as indexing and searching, Celery as task queue. AngularJS as the frontend framework. The whole system can handle tens of thousands of concurrent requests per second.

# ▼ SwitchPal, Project Coordinator 2015

- Lead a group of four people involving hardware engineer, designer, and software developer.
- Designed the Bluetooth protocol used to communicate between the device and the smart phone.
- Designed the hardware based on the TI CC2540 MCU, designed and implemented the iOS and Android apps to remotely control the device through the Bluetooth 4.0 protocol.

# **▼** Twitter Recommendation System, Principle Researcher 2012

- Proposed a recommendation framework based on user profiling, perform the Personalized Random Walk to propagate the relatedness value of keywords in tweets.
- Crawled tweets history from hundreds of thousands of Twitter users to evaluate the recommendation system, demonstrated the effectiveness of the proposed algorithms.

#### TECHNICAL SKILLS

- Research Fields: Word Embedding, Conditional Random Field, Factor Graph, MCMC, Entity Retrieval, Information Extraction, Knowledge Graph
- Language: Scala, Python, Java, JavaScript, C/C++
- Database: PostgreSQL, MongoDB, MySQL
- Framework: ElasticSearch, Lucene, Hadoop, Spark, ReactJS, AngularJS

#### **EXPERIENCE**

- Co-Founder of HyperLab Limited, responsible for the design and development of the Hyperlink platform
- Teaching Assistant for four undergraduate and master engineering courses at CUHK, 2012-2015
- Volunteer for the Charles K Kao Foundation for Alzheimer's Disease, 2011
- Organizer of the 6th Information Security and Countermeasures Contest, 2010
- Meritorious Award in Mathematical Contest In Modeling, 2009