

Chunliang Lyu

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EDUCATION

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| The Chinese University of Hong Kong, Ph.D. | 08/2011 - 01/2016 |
| • Research Area: Entity Retrieval, Natural Language Processing, Knowledge Graph. | |
| National Taiwan University of Science and Technology, Visiting Student | 01/2011 - 06/2011 |
| Beijing Institute of Technology, B.S. in Information Engineering, GPA 3.9 | 09/2007 - 06/2011 |

PROJECTS

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| Hyperlink (https://hyperlinkapp.com), Co-founder | 2014 - 2015 |
| Hyperlink is a unified platform for managing social bookmarks and cloud files across more than 13 online services, including Twitter, Facebook and Dropbox. | |
| • Implemented the backend in Python 3, using PostgreSQL/ElasticSearch/Celery as main stack. | |
| • Designed the Web frontend using AngularJS, including extensive unit and end-to-end testing. | |
| • Deployed on AWS, optimized the system to handle tens of thousands of concurrent requests per second. | |
| Entity Modeling and Retrieval System, Principle Researcher | 2012 - 2015 |
| Proposed a novel entity retrieval system based on entity factoid hierarchy, together with a new entity model considering DOM structure in the Webpage. Significantly improved the state-of-the-art performance. | |
| • Aggregated information about millions of entities from ClueWeb09 (25TB), Freebase (380GB), and DBpedia. | |
| • Developed an entity processing pipeline based on Spark, decreased the processing time from days to hours. | |
| SwitchPal, Project Leader | 2015 |
| SwitchPal is a sleek solution that snap over an existing switch and turn it into a smart one. Equipped with multiple sensors, it can learn and automate household devices according to human preferences. | |
| • Developed the hardware based on the TI CC2540 MCU, controllable via a custom Bluetooth 4.0 protocol. | |
| • Implemented and released the iOS and Android companion apps. | |
| • Saved more than 2/3 electric bill by deploying to student hostels to automatically control the air conditioners. | |
| Twitter Recommendation System, Principle Researcher | 2012 |
| Built a personalized tweets recommendation system based on user profiles, achieved superior performance. | |
| • Constructed user profiles by aggregating keywords in tweets and propagating interests among friends. | |
| • Crawled millions of tweets from hundreds of thousands of Twitter users to test the system. | |

TECHNICAL SKILLS

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- Language: Scala, Python, Java, JavaScript, C++, Go, PHP
 - Database: PostgreSQL, MongoDB, MySQL
 - Framework: ElasticSearch, Lucene, Hadoop, Spark, ReactJS, AngularJS
 - Tool: Git, Linux, AWS, Docker

EXPERIENCE

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- Semi-finalist in the 2015 Global Venture Labs Investment Competition, 2015
 - Teaching Assistant for four undergraduate 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 Winner in *Mathematical Contest In Modeling*, 2009

SELECTED PUBLICATIONS

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- C. Lu, W. Lam, Y. Liao. Entity Retrieval via Entity Factoid Hierarchy. In: *Proceedings of the 53rd Annual Meeting of the Association for Computational Linguistics (ACL)*. 2015.
 - C. Lu, L. Bing, W. Lam, K. Chan, Y. Gu. Web Entity Detection for Semi-structured Text Data Records with Unlabeled Data. *International Journal of Computational Linguistics and Applications (IJCLA)*. 2013.
 - C. Lu, L. Bing, W. Lam. Structured Positional Entity Language Model for Enterprise Entity Retrieval. In: *Proceedings of the 22nd ACM Conference on Information and Knowledge Management (CIKM)*. 2013.