CONTACT E-mail: aldrianobaja.m@gmail.com INFORMATION GitHub: http://github.com/justhalf

RESEARCH Interests Natural language processing, Combinatorics, Algorithm

Publications Low-resource Cross-lingual Event Type Detection in Documents

via Distant Supervision with Minimal Effort

Aug '18

<u>Aldrian Obaja Muis,</u> Naoki Otani, Nidhi Vyas, Ruochen Xu, Yiming Yang, Teruko Mitamura, and Eduard Hovy.

To appear in Proceedings of the 27th International Conference on Computational Linguistics (COLING 2018). Long paper

Labeling Gaps Between Words: Recognizing Overlapping Mentions with Mention Separators Sep '17

Aldrian Obaja Muis and Wei Lu

In Proceedings of the 2017 Conference on Empirical Methods in Natural Language Processing (EMNLP 2017). Long paper. [Supplementary Material].

MalwareTextDB: A Database for Annotated Malware Articles

Aug '17

Sweekiat Lim, Aldrian Obaja Muis, Wei Lu and Chen Hui Ong

In Proceedings of the conference of the Association for Computational Linguistics (ACL 2017). Long paper. [New Dataset].

Efficient Dependency-guided Named Entity Recognition

Feb '17

Zhanming Jie, Aldrian Obaja Muis and Wei Lu

In Proceedings of the 2017 Conference on Artificial Intelligence (AAAI-17)

• Performed the theoretical complexity analysis of the model via combinatorial analysis

Learning to Recognize Discontiguous Entities

Nov '16

Aldrian Obaja Muis and Wei Lu

In Proceedings of the 2016 Conference on Empirical Methods in Natural Language Processing (EMNLP 2016). Long paper. [Supplementary Material]

• Includes some combinatorial analysis in the supplementary

Weak Semi-Markov CRFs for NP Chunking in Informal Text

Jun '16

Aldrian Obaja Muis and Wei Lu

In Proceedings of the 2016 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies (NAACL 2016). Short paper

Work Experience

Singapore University of Technology and Design (SUTD), Singapore

Research Assistant

Jul '15 - Jun '17

- Exploring semantic representations using graphical models for structured prediction
- Supervising undergraduate student researchers in research projects
- Advisor: Asst. Prof. Lu Wei

Knorex Pte. Ltd., Singapore

Research Engineer

Jul '13 - Jun '15

- Designed and performed experiments for text classification on news articles
- Implemented and extended existing method on concept extraction for key terms extraction
- Redesigned and optimized a system for efficient distributed computing
- Developed and maintained in-house tools for natural language processing

EDUCATION

National University of Singapore, Singapore

Jul '09 - Jul '13

Undergraduate, School of Computing

- Bachelor of Computing (Computer Science, First Class Honours)
- Recipient of Lijen Industrial Development Award (Second top student)
- Majoring in Computer Science with focus area on Computer Networks
- Taking the course under Turing (research) Program
- Minoring in mathematics

ACADEMIC EXPERIENCE

School of Computing, National University of Singapore, Singapore

Web Project Developer for TEAMMATES

May '12 - Jun '12

- Evaluated existing code and improve testing time to 5 times faster by refactoring and recoding the whole testing phase in 6 weeks
- Migrated the application from a client-based Javascript website into server-based JSP website

Teaching Assistant (TA)

Class tutor for CS1231: Discrete Structures

Laboratory TA for CS1020: Programming Methodology 2

Laboratory TA for CS1020: Programming Methodology 2

Laboratory TA for IT1006: MATLAB Programming

Jan '11 - Apr '11

Jan '11 - Apr '11

- Performed beyond the call of duty by conducting a mock exam to help students prepare for their final exams
- Delivered presentations in class of around 14 to 22 students every week during the term

Past Research

School of Computing, National University of Singapore, Singapore

Final Year Project (Honours Project)

May '12 - Apr '13

- Evaluated an existing algorithm for domain specific Word Sense Disambiguation through comparison with other algorithms
- Advisor: Prof. Ng Hwee Tou

Undergraduate Research Opportunity Program (UROP)

May '11 - Apr '12

- Implemented and evaluated existing algorithm on extracting data from the Web under different domain through extensive experiment
- Advisor: A/P Stéphane Bressan

Undergraduate Student Researcher (USR)

May '10 - Dec '10

- Analyzed the quality of translation from English to Malay and English to Bahasa Indonesia
- Adapted existing Malay word stemming program into Bahasa Indonesia
- Studied the language differences between Malay and Bahasa Indonesia
- Advisor: Prof. Ng Hwee Tou

CO-CURRICULAR ACTIVITIES

NUSSU commIT (formerly known as NUSSU CBLC until Jun '11)

Head of Technical Cell Assistant Head of Technical Cell Member of Technical Cell Jul '12 - Jun '13

Jul '10 - Jun '12

Aug '09 - Jun '10

- Maintained 100+ computers in the computer clusters in NUS through general cleanup, backup, and automated updates
- Developed public and internal website of NUSSU commIT for intensive daily usage

Technical Head of NUSSU CBLC IT Flair 2010

Feb '10 - Apr '10

- IT Flair is a combination between IT Fair and Flea market
- Developed website as publication media for the event and for selling second-hand items

Vice Project Director of NUSSU CBLC Cyberia Camp 2010

Oct '10 - Dec '10

- Cyberia Camp is a 3-day camp for certified Adobe Photoshop and Illustrator Training
- Led a team of 14 people to successfully organized the camp and received overwhelming response and positive feedback

NUS ISCF (Indonesian Students' Christian Fellowship)

Executive Committee

Jul '11 - May '13

• Managed a weekly group meeting of around 40 students

Awards

Lijen Industrial Development Award

Jul '13

• Represents the second top student in the batch

Dean's List Recipient for 4 (four) semesters

Jul '09 - Dec '11

• Represents top 5% of the cohort in Jul '09, Jan '10, Jan '11, Jul '11

Scholarship from Indonesian Government to pursue tertiary education

Bronze medal, International Mathematical Olympiad in Bremen, Germany

Bronze medal, International Mathematical Olympiad in Madrid, Spain

Absolute winner, National Mathematical Olympiad in Surabaya, Indonesia

Bronze medal, National Mathematical Olympiad in Semarang, Indonesia

Sep '06

Gold medal, National Mathematical Olympiad in Jakarta, Indonesia

Sep '05

SKILLS

Computer Programming:

 \bullet Java, Python, JavaScript, Perl, C/C++

Software Engineering:

• Designed and developed web and desktop applications

Information/Internet Technology:

• Maintained small to moderate size computer networks

Mathematics:

• Combinatorics, especially graph theory

Hobbies and Interest Music (playing piano and guitar, leading a youth choir in church), creative literature, reading

books

LANGUAGES Bahasa Indonesia (mother tongue), English