Aldrian Obaja Muis   *Curriculum Vitae*

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

RESEARCH
INTERESTS
Natural language processing, Combinatorics, Algorithm

PUBLICATIONS

Labeling Gaps Between Words: Recognizing Overlapping Mentions with Mention Separators   **Sep '17**
Aldrian Obaja Muis and Wei Lu
To appear in Proceedings of the 2017 Conference on Empirical Methods in Natural Language Processing (**EMNLP 2017**). Long paper

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
- 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 - Present**
- 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	**Aug '12 - Nov '12**
	Laboratory TA for CS1020: Programming Methodology 2	**Jan '12 - Apr '12**
	Laboratory TA for CS1020: Programming Methodology 2	**Aug '11 - Nov '11**
	Laboratory TA for IT1006: MATLAB Programming	**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 **Jul '12 - Jun '13**
Assistant Head of Technical Cell **Jul '10 - Jun '12**
Member of Technical Cell **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 **Jul '09 - Jun '13**
Bronze medal, International Mathematical Olympiad in Bremen, Germany **Jul '09**
Bronze medal, International Mathematical Olympiad in Madrid, Spain **Jul '08**
Absolute winner, National Mathematical Olympiad in Surabaya, Indonesia **Sep '07**
Bronze medal, National Mathematical Olympiad in Semarang, Indonesia **Sep '06**
Gold medal, National Mathematical Olympiad in Jakarta, Indonesia **Sep '05**

SKILLS Computer Programming:
- 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