

## EDUCATION AND QUALIFICATIONS

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**Singapore** **National University of Singapore** **Aug 2016 – Jan 2018**

- Master of Science (Computer Science) by Research (Machine Learning and Natural Language Processing). GPA: 4.83/5.00
- Thesis Title: [Automated Diagnosis of Acute Appendicitis Based on Clinical Notes](#)
  - Collaborated with National University Hospital (NUH) and developed a patented novel neural network model for predicting *acute appendicitis* using free-text emergency department (ED) notes written by doctors.

**Singapore** **National University of Singapore** **Aug 2012 – Jun 2016**

- Bachelor of Computing (Computer Science) with Honours (Distinction). GPA: 4.41/5.00
- Specializes in Artificial Intelligence (AI) and Natural Language Processing (NLP).

## PUBLICATIONS AND PATENTS

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- Yuwono, S. K., Biao, W., & D'Haro, L. F. (2018). [Automated Scoring of Chatbot Responses in Conversational Dialogue](#). In *Proceedings of International Workshop on Spoken Dialog System Technology (IWSDS 2018), WOCHAT*.
- Yuwono, S. K., Ng, H. T., & Ngiam, K. Y. (2017). System and Method for Computerized Diagnosis Based on Clinical Notes. Singapore Patent No. 10201709877S.
- Yuwono, S. K., Ng, H. T., & Ngiam, K. Y. (2016). [Automated Anonymization as Spelling Variant Detection](#). In *Proceedings of the Computational Linguistics (COLING 2016), Clinical Natural Language Processing Workshop*.

## HONORS AND AWARDS

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- **SembCorp Undergraduate Scholarship** (2012-2016) Scholarship for international undergraduate students.
- **ASEAN Scholarship** (2006-2011) Scholarship for international students (Secondary and High School).
- **IEEE Singapore Computer Society Book Prize** (2016) Best honours project (B.Comp Dissertation) in AY 2015/2016.
- **Certificate of Distinction in Information Retrieval** (2016) Award for outstanding result in IR focus area required modules.
- **Certificate of Distinction in Artificial Intelligence** (2015) Award for outstanding result in AI focus area required modules.
- **Silver Medal, 14<sup>th</sup> National Olympiad in Informatics Singapore** (2011) Annual National Programming Contest.

## EMPLOYMENT

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**Research Assistant** **National University of Singapore** **Jun 2016 - Dec 2017**

- Responsible for building models and applying machine learning and NLP in healthcare domain: anonymization, data cleaning, model building and tuning, and clinical trial/validation set-up.
- Developed algorithm to perform anonymization of patient information in electronic medical records.
- Developed a patented novel neural network model for predicting acute appendicitis using free-text ED notes

**Software Engineer Intern** **Microsoft** **Jun - Aug 2015**  
Microsoft Office Core Experience (CXE) Team Redmond, WA

- Developed internal tools to process, automatically match call stacks, and visualize memory events and leaks.
- Developed a prototype tool to detect critical thread (i.e. UI) blocking during runtime of multi-threaded Office applications.
- Offered full-time software engineer position (next grade, non-entry level).

**Software Developer Intern** **Autodesk** **Dec 2014 - May 2015**  
Maya Animation Media and Entertainment (M&E) Team Singapore

- Developed new features contributing to Maya Time Editor and fixed multiple bugs.
- Development involving various parts including back-end, graphical user interface, and Maya scripting language (MEL).

## TECHNICAL EXPERIENCE - PROJECTS

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- [Sentiment Classifier](#) (2018). Neural network model to classify movie review as positive or negative. *Python, PyTorch*
- [Chatbot Scorer](#) (2017). Developed machine learning models (traditional and neural network models) to score the quality of chatbot responses in conversational dialogue setting. *Python, Scikit-Learn, Keras, Theano*
- [Visuocial](#) (2016). A web application to visualize user's aggregated social media activities (Facebook, Twitter, Instagram). Facebook, Twitter, and Instagram OAuth login was implemented. *Node.js, JavaScript, HTML, CSS, EJS, d3.js, Bootstrap*
- [Stochastic POS Tagger](#) (2014). Part-of-Speech Tagger using Hidden-Markov Model built from scratch. Supervised Learning and Kneser-Ney Smoothing was implemented. *C++, Machine Learning, Natural Language Processing*

## LANGUAGES AND TECHNOLOGIES

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- C++; C#; Java; Android; Python; PHP; MySQL; JavaScript; Keras; PyTorch; Theano; Visual Studio; Eclipse; Android Studio.