

EDUCATION AND QUALIFICATIONS

Singapore **National University of Singapore** **Aug 2016 – Present**
• Doctor of Philosophy (Computer Science). Research area: Machine Learning and Natural Language Processing.

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), Information Retrieval (IR), and Natural Language Processing (NLP).
• Undergraduate Coursework: Data Structure and Algorithms; Computer Architecture, Calculus for Computing; Discrete Mathematics; Software Engineering; Multimedia Content Analysis and Search; Information Retrieval; Social Media Computing; AI Planning and Decision Making; **Machine Learning; Natural Language Processing; Competitive Programming.**

HONORS AND AWARDS

- **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, 14th National Olympiad in Informatics Singapore** (2011) Annual National Programming Contest.

EMPLOYMENT

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.

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).

Solution Analyst Intern **Marina Bay Sands** **May - Aug 2014**
Email Tracker Application IT Application Support Team Singapore
• Developed application from scratch to track computer-generated email, runs in the background without user interface.
• Estimated to save SGD 24,000 from productivity perspective.

Teaching Assistant **National University of Singapore** **Aug 2013 - May 2015**
CS1020E - Data Structures and Algorithms 1 (Object-Oriented Programming, List, Recursion, and Analysis); Average Rating: 4.8/5.0
CS2010 - Data Structures and Algorithms 2 (Graph, Binary Tree and its variants)

TECHNICAL EXPERIENCE - PROJECTS

- **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*
 - <https://visuocial.com>
- **Stochastic POS Tagger** (2014). Part-of-Speech Tagger using Hidden-Markov Model. Supervised Learning and Kneser-Ney Smoothing was implemented. *C++, Machine Learning, Natural Language Processing*
 - <https://github.com/yulonglong/Stochastic-POS-Tagger>
- **Web Application Development (Algorithm Visualization)** (2014). "List" Algorithm Visualization to facilitate students in understanding data structures and algorithms. *HTML, JavaScript, CSS, d3.js, JQuery*
 - <https://visualgo.net/en/list>
- **Tetris Artificial Intelligence** (2014). AI to play Tetris and obtain best score possible. Implemented 3 steps look-ahead and Genetic Algorithm for better performance. *Java*
 - <https://github.com/yulonglong/TetrisAI>

LANGUAGES AND TECHNOLOGIES

- C++; C#; Java; Android; HTML; PHP; Node.js; MySQL; JavaScript; CSS; d3.js; JQuery.
- Visual Studio; Eclipse; Android Studio.

For complete profile and projects, please visit <https://yulonglong.com> or <https://sg.linkedin.com/in/stevenkesteryuwono>