# Dr Steven Halim CV

Senior Lecturer (dcssh@nus.edu.sg or stevenhalim@gmail.com)

Religion : Christianity
Nationality : Indonesian

Place & Date of Birth: Jakarta, Indonesia, 24 May 1982

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#### **Academic Qualifications**

2004-2010 Doctor of Philosophy

National University of Singapore (NUS), School of Computing (SoC)

Thesis: "Designing and Tuning SLS via Integrated White+Black Box Approach"

Supervisor: A/P Roland Yap Hock Chuan (SoC, NUS), A/P Lau Hoong Chuin (SIS, SMU)

2000-2004 Bachelor of Computing (Computer Science) with Honours

**NUS SoC** 

## **Employment/Appointment (Teaching)**

2021-present NUS, SoC Faculty Teaching Evaluation Committee Member

2016-present NUS, SoC Senior Lecturer 2014-present NUS, Sheares Hall Resident Fellow

2011-2015 NUS, SoC Lecturer

2009-present NUS, SoC NUS International Collegiate Programming Contest (ICPC) Coach 2009-present Ministry of Education Singapore International Olympiad in Informatics (IOI) Team Leader

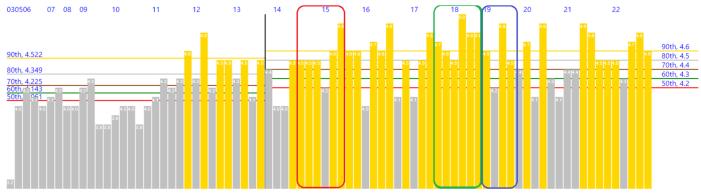
2009-2010 NUS, SoC Instructor

2007-2008 NUS, SoC Teaching Assistant

#### (Teaching) Awards

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(Teaching) Award (number of times awarded)	Level	(Academic) Year	Remarks
Annual Teaching Excellence Award Honour Roll	University	2021 (0.1 AYs ago)	University level, Honour Roll AY 2020/21 to AY2025/26 (-3.8 AYs later)
5x ICPC World Finals Coach Award ICPC Foundation Competitive Learning Institute (CLI) Fellows Award	International	2021 (0.7 AYs ago)	For coaching 5 (or more) NUS ICPC World Finalist teams For writing Competitive Programming book
Annual Teaching Excellence Award (3)	University	2018/19 (1.2 AYs ago)	Third, University level (Apr 2021)
Annual Teaching Excellence Award (2)	University	2017/18 (2.6 AYs ago)	Second, University level (Nov 2019)
National Day Awards (1)	National	2018 (3.9 AYs ago)	Commendation Medal (Pingat Kepujian), Ministry of Education, (Nov 2018)
Annual Teaching Excellence Award (1)	University	2014/15 (6.2 AYs ago)	First breakthrough, University level (May 2016)
Faculty Teaching Excellence Award (3) with Honour Roll (1)	Faculty	2014/15 (7.2 AYs ago)	Third, Faculty level, Honour Roll AY 2015/16 to AY 2020/21
Faculty Teaching Excellence Award (2)	Faculty	2012/13 (9.2 AYs ago)	Second, Faculty level
Faculty Teaching Excellence Award (1)	Faculty	2011/12 (10.2 AYs ago)	First breakthrough, Faculty level
Best Teaching Assistant Award (1)	Faculty	2007/08 (14.2 AYs ago)	No longer a Teaching Assistant now

#### Student Feedback Ratings (2003-present), visualized



Steven's teaching feedback rating from 2003 – present (18 Academic Years) (**AY2014/15-red**, **AY2017/18-green**, and **AY2018/19-blue** – the 3 AYs with ATEAs and modules at  $80^{th}$  percentile ( $\geq$  4.5 out of 5.0) or above/oranges are highlighted)

## **Ranges of Classes Taught:**

- -. 19 different module codes of algorithm and programming classes over 18 Academic Years.
- -. A total of approximately ~6000 NUS (and some exchange) students.
- -. 1st to 4th year undergraduate students and 1st year Master of Computing students.
- -. The smallest module has  $\sim$ 20 students and the largest module has  $\sim$ 300 students.
- -. Developed the first offerings of CS2010 (Data Structures and Algorithms/DSA) module in 2011 and CS2040 (DSA) module in 2017.
- -. Led the revamp of CS4324 (Optimisation Algorithms) module in 2016.
- -. The easiest module is the basic 'Programming Methodology' module for 1<sup>st</sup> year Undergraduate students.
- -. The most challenging is 'Competitive Programming' module for the brightest NUS Undergraduate students.

#### **Ranges of Programming Languages Taught:**

- -. Primary: C++ (std=c++17), Python (3), Java (11 LTS).
- -. For VisuAlgo and Web Development courses: JavaScript, PHP, MySQL.
- -. In the past: MATLAB, Pascal, Scheme.

#### **Selected Publications:**

- -. "Competitive Programming 4: The New Lower Bound of Programming Contests in the 2020s", Olympiad in Informatics, IOI 2020, Singapore <a href="https://www.lulu.com/spotlight/stevenhalimatgmaildotcom">https://www.lulu.com/spotlight/stevenhalimatgmaildotcom</a> and <a href="https://ioinformatics.org/journal/v14">https://ioinformatics.org/journal/v14</a> 2020 177 180.pdf
- -. "VisuAlgo Visualising Data Structures and Algorithms Through Animation", Olympiad in Informatics, IOI conference, 26 July-2 August 2015, Kazakhstan. <a href="https://ioinformatics.org/journal/v9\_2015\_243\_245.pdf">https://ioinformatics.org/journal/v9\_2015\_243\_245.pdf</a>
- -. "Expecting the Unexpected", Olympiad in Informatics, IOI conference, 6-13 July 2013, https://ioinformatics.org/journal/INFOL113.pdf
- -. "Learning Algorithms with Unified and Interactive Visualization", Olympiad in Informatics, IOI conference, 23-30 September 2012, Italy. https://ioinformatics.org/journal/INFOL099.pdf
- -. "Teaching Programming Methodology using MATLAB in NUS", CDTLink <a href="https://blog.nus.edu.sg/cdtlink/files/2019/11/feb2010.pdf">https://blog.nus.edu.sg/cdtlink/files/2019/11/feb2010.pdf</a>