



Curricular Vitae

TS. DR. NG KENG YAP

Senior Lecturer
Faculty of Computer Science and Information Technology
Universiti Putra Malaysia
43400 Serdang Selangor Malaysia

I. ACADEMIC QUALIFICATION

- Bachelor of Computer Science (Universiti Putra Malaysia), 2001
- Master (Sc) Computer Science (Universiti Putra Malaysia), 2005
- PhD Computer Science (University of Manchester, UK), 2015

II. PROFESSIONAL QUALIFICATIONS

- Certified Tester Foundation Level, (CTFL, ISTQB)
- Certified Tester Advanced Level, (CTAL – Test Manager, ISTQB)

III. WORKING EXPERIENCE

- Senior Lecturer, Universiti Putra Malaysia (2015 - Present)
- Tutor, Universiti Putra Malaysia (2007 – 2014)
- IT Officer, Universiti Putra Malaysia (2005-2007)
- Director, AcuteOne Sdn Bhd (2003-2005)
- Research Assistant, Universiti Putra Malaysia (2003-2005)
- IT Officer, Universiti Putra Malaysia (2001-2003)

IV. TEACHING EXPERIENCE

Undergraduate:

programming (Java), Object-oriented Programming (Java), Web Application Development, Mobile Application Development, Software Testing, Discrete Structure, Operating Systems, Software Engineering

Postgraduate:

Software Metric, Software Modelling

Teaching assistant:

Computer Programming (University of Manchester)

V. RESEARCH AND CONSULTANCIES

Research Areas:

Software Components, Business Analytics, Software Engineering for Artificial Intelligent (SE4AI) Systems.

Selected Completed research projects:

- The vintage approach to palm oil production in Malaysia. Malaysian Palm Oil Board (MPOB), Strategic Consultant on ICT to IKDPM, Universiti Putra Malaysia, ICT Consultant to First Option Consulting Sdn Bhd. Code Review and Evaluation of MagPA Excel Workbook and VBA Macros Programming (IKDPM), Evaluation of Financial Aid Information System, Jabatan Kebajikan Malaysia (JKM), Property Market Analysis and Price Prediction – Big Data Analytics (SpeedProp Sdn Bhd)

Ongoing projects:

- Principal Researcher and Consultant, Orangebeam-UPM Research on Disruptive Technology in Construction Project Management. An Industry Project (2020 – Ongoing).
- Principal Researcher and Consultant, UPM-MBSJ-Digi Research on Traffic Flow Analysis based on CCTV Imagery Data (2019 – Ongoing).
- Principal Researcher and Consultant, Dr. Quek, Columbia Hospital, JB, Smart Cradle Research and Prototype Development (2021 - Ongoing).

VI. PUBLICATIONS

Pu, S., Ahmad, N. A., Khambari, M. N. M., & Yap, N. K. (2021). The effectiveness of Online Emergency Management in Colleges and Universities: An Empirical Analysis from Mainland China. *Revista Argentina De Clinica Psicologica*, 30(1), 928-940.

Pu, S., Ahmad, N. A., Khambari, M. N. M., & Yap, N. K. (2021). Identification and analysis of core topics in educational artificial intelligence research: A Bibliometric analysis. *Cypriot Journal of Educational Sciences*, 16 (3), 995-1009.

Nejati, F., Yap, N. K., Ghani, A. A. A., & Jaffar, A. (2021). Handling State Space Explosion in Component-based Software Verification: A Review. *IEEE Access*, 9, 77526 – 77544.

Ding, K., Choo, W. C., Ng, K. Y., & Ng, S. I. (2021). Exploring Sources of Satisfaction and Dissatisfaction in Airbnb Accommodation Using Unsupervised and Supervised Topic Modeling. *Front Psychol*, 12:659481, 1-19.

Ding, K., Choo, W. C., Ng, K. Y., & Ng, S. I. (2020). Employing structural topic modelling to explore perceived service quality attributes in Airbnb accommodation. *International Journal of Hospitality Management*, 91, 102676. <https://doi.org/10.1016/j.ijhm.2020.102676>

Nejati, F., Yap, N. K., Ghani, A. A. A., & Jaffar, A. (2020). PUTRACOM: A formalism of a novel component model. *International Journal on Advanced Science, Engineering and Information Technology*, 10(4). <https://doi.org/10.18517/ijaseit.10.4.10179>

Pu, S., Ahmad, N. A., Khambari, M. N. M., & Yap, N. K. (2020). Factors affecting practical knowledge acquisition of pre-service computer science teachers during the practicum: A multiple regression analysis. *International Journal of Learning, Teaching and Educational Research*, 19(2). <https://doi.org/10.26803/ijlter.19.2.13>

Kamarudin, A., Yap, N. K., Ali, M. A., & Phang, L. S. (2020). A Preliminary Component Model for IoT. *IOP Conference Series: Materials Science and Engineering*, 769(1). <https://doi.org/10.1088/1757-899X/769/1/012003>

Ding, K., Choo, W. C., Ng, K. Y., & Ng, S. I. (2020). Employing structural topic modelling to explore perceived service quality attributes in Airbnb accommodation. *International Journal of Hospitality Management*, 91. <https://doi.org/10.1016/j.ijhm.2020.102676>

Ali, M. A., & Yap, N. K. (2019). Software component quality model. *International Journal of Engineering and Advanced Technology*, 9(1). <https://doi.org/10.35940/ijeat.A2659.109119>

Shiang, C. W., Tee, F. S., Halin, A. A., Yap, N. K., & Hong, P. C. (2018). Ontology reuse for multiagent system development through pattern classification. *Software - Practice and Experience*, 48(11). <https://doi.org/10.1002/spe.2595>

Nazri, A., Ghani, A. A. A., Hafez, I., & Ng, K.-Y. (2018). A new theoretical framework for testing consciousness in a machine. In *Advances in Intelligent Systems and Computing* (Vol. 700). https://doi.org/10.1007/978-3-319-72550-5_32

Altarturi, H. H., Ng, K.-Y., Ninggal, M. I. H., Nazri, A. S. A., & Ghani, A. A. A. (2018). A requirement engineering model for big data software. *2017 IEEE Conference on Big Data and Analytics, ICBDAA 2017, 2018-Janua*. <https://doi.org/10.1109/ICBDAA.2017.8284116>

Lau, K.-K., Ng, K.-Y., Rana, T., & Tran, C. M. (2012). Incremental construction of component-based systems. *CBSE'12 - Proceedings of the 15th ACM SIGSOFT Symposium on Component Based Software Engineering*. <https://doi.org/10.1145/2304736.2304746>

Lau, K.-K., Nordin, A., & Ng, K.-Y. (2011). Extracting elements of component-based systems from natural language requirements. *Proceedings - 37th EUROMICRO Conference on Software Engineering and Advanced Applications, SEAA 2011*. <https://doi.org/10.1109/SEAA.2011.16>

Sanatnama, H., Ghani, A. A. A., Yap, N. K., & Selamat, M. H. (2008). Mediator connector for composition of loosely coupled software components. *Journal of Applied Sciences*, 8(18). <https://doi.org/10.3923/jas.2008.3139.3147>

VII. COMMITTEE MEMBERS

- Director, Computing at Schools Programme (FSKTM, UPM)
- Member of Putra Future Classroom (FSKTM, UPM)
- Member of Mobility Unit (FSKTM, UPM)
- Member of JINM Unit (FSKTM, UPM)

VIII. AWARDS

- Credit Award, MSC-IHL Busines Plan Competition, Intervarsity Business Plan Category 2007
- 1st Runner Up of National MSC-IHL Business Plan Competition, Business Plan Category 2013 (Student Advisor)

IX. PROFESSIONAL MEMBERSHIPS

- Member, IEEE (#91225101)
- Professional Technologist Member, Malaysian Board of Technology (MBOT) (#PT21080058)

X. PROFESSIONAL SERVICES

- Guest editor, *International Journal of Advanced Technology and Engineering Exploration (IJATEE)*, Scopus Indexed.
- Program committee, *Applied Informatics International Conference 2022 (AiiC2022)*.
- Program Chair, *Satellite Conference of Artificial Intelligence and Data-Driven Innovation (AIDDI2021)*.
- Track Chair, *Software Engineering and Information Systems, International Conference on Interdisciplinary Computer Science and Engineering (ICICSE2021)*.
- Program committee, *Applied Informatics International Conference 2020 (AiiC2020)*.
- Program committee, *International Conference on Interdisciplinary Computer Science and Engineering 2020 (ICICSE2020)*.

- Program committee, Applied Informatics International Conference 2019 (AiiC2019).
- Program committee, International Conference on Interdisciplinary Computer Science and Engineering 2019 (ICICSE2019).

- Manager, Malaysian web mirror sites for R, LaTeX, Ubuntu, <https://mirrors.upm.edu.my>
- Facilitator/Panel in MQA Internal Audit, Panel Penilai Luar (PPL) for KV Shah Alam, KV Kudat, KV Pasir Mas, KV Tengku Ampuan Afzan (2018-2020).
- Curriculum External Examiner and Academic Advisor for Diploma in E-Commerce (DEC) Programme, New Era University College (2020).

Note: Detailed CV is available upon request.