# Chaiyong Ragkhitwetsagul

### **Address**

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Thailand

#### **Research Interests**

Software Engineering, Static Software Analysis, Code Clone Detection, Mining Software Repositories

## **Professional Experience**

Lecturer, Faculty of ICT, since December 2012 Assistant Dean of the Academic Administration, October 2018 – October 2020 Mahidol University Thailand

System Analyst, 2009 – 2012 National Economic and Social Development Board Thailand

Software Test Engineer, 2006 – 2007 Microsoft (Thailand) Thailand

# **Education**

Doctor of Philosophy (Computer Science – Software Engineering)
Department of Computer Science , University College London, UK, October 2018

Master of Science in IT – Very Large Information Systems Carnegie Mellon University, USA, December 2008

Bachelor of Engineering, Department of Computer Engineering (Magna cum Laude) Kasetsart University, Thailand, March 2006

#### **Selected Honors**

PhD Thesis Awards, National Research Awards 2020, National Research Council of Thailand

The Best Tool Demo Award, 36<sup>th</sup> IEEE International Conference on Software Maintenance and Evolution (ICSME 2020) - Tool Demo, Adelaide, Australia (Virtual Event).

The People's Choice Award (best presentation), 12<sup>th</sup> International Workshop on Software Clones, Campobasso, Italy, 2018

The People's Choice Award (best presentation), 11<sup>th</sup> International Workshop on Software Clones, Klagenfurt, Austria, 2017

Full PhD scholarship, Mahidol University, 2014

Full Master's degree scholarship, The Royal Thai Government, 2007

Winner of the 8<sup>th</sup> National Software Contest of Thailand (NSC) – Software for Entertainment, 2006

### **Selected Professional Services**

Program committee of the The 13th IEEE International Conference on Knowledge and Systems Engineering (KSE 2021).

Program committee of the 15<sup>th</sup> International Workshop on Software Clones (IWSC 2021).

Program committee, Replications and Negative Results Track of the 13th Symposium on Search-Based Software Engineering (SSBSE 2021).

Program committee, Research Track of the 37<sup>th</sup> International Conference on Conference on Software Maintenance and Evolution (ICSME 2021).

Program committee, Late Breaking Results track of the 36<sup>th</sup> IEEE/ACM International Conference on Automated Software Engineering (ASE 2021).

Program committee, Posters Track of the 36<sup>th</sup> IEEE/ACM International Conference on Automated Software Engineering (ASE 2021).

Program committee, Posters Track of the 43<sup>rd</sup> International Conference on Software Engineering (ICSE 2021).

Program co-chair, Early Research Achievement (ERA) track of the 29<sup>th</sup> IEEE/ACM International Conference on Program Comprehension (ICPC 2021).

Guest Editors (with Hitesh Sajnani) for the Journal of Systems and Software: Special Issue on Software Clones.

Judge for the ACM Student Research Competition-track of the  $42^{nd}$  International Conference on Software Engineering (ICSE 2020)

Program committee, Late Breaking Results track of the 35<sup>th</sup> IEEE/ACM International Conference on Automated Software Engineering (ASE 2020).

Program committee, Research Papers track of the 35<sup>th</sup> IEEE/ACM International Conference on Automated Software Engineering (ASE 2020).

Program committee, Technical Research track of 28<sup>th</sup> IEEE/ACM International Conference on Program Comprehension 2020 (ICPC 2020).

Program committee of the 13<sup>th</sup> Innovations in Software Engineering Conference (ISEC 2020).

Program co-chairs of the 14<sup>th</sup> International Workshop on Software Clones (IWSC 2020).

Program committee, Technical Research track of the 35<sup>th</sup> IEEE International Conference on Software Maintenance and Evolution (ICSME 2019).

Program committee, Technical Research track of 27<sup>th</sup> IEEE/ACM International Conference on Program Comprehension 2019 (ICPC 2019).

Program committee, the 13th International Workshop on Software Clones (IWSC 2019).

#### **Selected Research Grants**

Automated Software Engineering for Thailand Software Industry, Royal Academy of Engineering, UK and Thailand Science Research and Innovation (TSRI) (13,345 GBP), 2019 – 2021.

UIC grant, University of Wollongong, 2019 - 2020.

Amazon AWS Credits for Research (20,000 USD), 2018

NSF Student Travel Support (700 USD), the 8<sup>th</sup> Symposium on Search-Based Software Engineering, 2016

Microsoft Azure Research Award (20,000 USD), 2016

# **Selected Invited Talks and Keynote Addresses**

N/A

## **Doctoral Student Supervision**

N/A

### **Publication Statistics**

Monographs: 0
Journal Articles: 5
Conference Papers: 9
Book Chapters: 1
Workshop Papers: 5
Edited Volumes: 0

Citations (12 October 2021):

Google Scholar: 333 with h-index of 9

Scopus: 136 (excluding self-citations) with h-index of 7

**Selected Publications** (Full publication list: <a href="https://cragkhit.github.io/research.html">https://cragkhit.github.io/research.html</a>)</a>

# **Book Chapters**

Krinke, J., & Ragkhitwetsagul, C. (2021). *Code Similarity in Clone Detection (Book Chapter)*. In K. Inoue & C. K. Roy (Eds.), Code Clone Analysis (pp. 135–160), Springer.

### **Journals**

Choetkiertikul, H. K. Dam, T. Tran, T. Pham, C. Ragkhitwetsagul, A. Ghose. *Automatically recommending components for issue reports using deep learning*. Empirical Software Engineering (EMSE), (2021) 26:14.

M. Paixao, J. Krinke, D. Han, C. Ragkhitwetsagul, M. Harman. *The Impact of Code Review on Architectural Changes*. Transactions on Software Engineering (TSE), 2019.

C. Ragkhitwetsagul, J. Krinke. Siamese: Scalable and Incremental Code Clone Search via Multiple Code Representations. *Empirical Software Engineering*, 2019.

- C. Ragkhitwetsagul, J. Krinke, M. Paixao, G. Bianco, R. Oliveto, Toxic Code Snippets on Stack Overflow, *IEEE Transactions on Software Engineering*, 2019.
- C. Ragkhitwetsagul, J. Krinke, D.Clark. A Comparison of Code Similarity Analysers. *Empirical Software Engineering*, https://doi.org/10.1007/s10664-017-9564-7, 2017.

#### **Conferences**

Robert White, Jens Krinke, Earl Barr, Federica Sarro, Chaiyong Ragkhitwetsagul, *Artefact Relation Graphs for Unit Test Reuse Recommendation*. in the Proceedings of IEEE International Conference on Software Testing (ICST), Virtual Event.

- D. Han, C. Ragkhitwetsagul, J. Krinke, M. Paixao, G. Rosa, *Does code review really remove coding convention violations?*. in the 20th IEEE International Working Conference on Source Code Analysis and Manipulation (SCAM) in Adelaide, Australia.
- C. Khanan, W. Luewichana, K. Pruktharathikoon, J. Jiarpakdee, C. Tantithamthavorn, M. Choetkiertikul, C. Ragkhitwetsagul, T. Sunetnanta. *JITBot: An Explainable Just-In-Time Defect Prediction Bot*, in the 35th IEEE/ACM International Conference on Automated Software Engineering (ASE '20) Tool Demo Track, September 21–25, 2020, Virtual Event, Australia
- P. Phan-udom, N. Wattanakul, T. Sakulniwat, C. Ragkhitwetsagul, T. Sunetnanta, M. Choetkiertikul, R.G. Kula *Teddy: Automatic Recommendation of PythonicIdiom Usage For Pull-Based Software Project*, in the 36th IEEE International Conference on Software Maintenance and Evolution (ICSME 2020) in Adelaide, Australia.
- J. Wilkie, Z. Al Halabi , A. Karaoglu , J. Liao , G. Ndungu, C. Ragkhitwetsagul, M. Paixao , J. Krinke. Who's this? Developer identification using IDE event data. In *the 15<sup>th</sup> International Conference on Mining Software Repositories Mining Challenge (MSR 2018)*, 2018. Gothenburg, Sweden
- M. Paixao, J. Krinke, D. Han, C. Ragkhitwetsagul and M. Harman. Are Developers Aware of the Architectural Impact of Their Changes? In the 32<sup>nd</sup> IEEE/ACM International Conference on Automated Software Engineering (ASE 2017), 2017. Illinois, USA
- C. Ragkhitwetsagul, M. Paixao, M. Adham, S. Busari, J. Krinke, and J. H. Drake. Searching for Configurations in Clone Evalution: A Replication Study. In 8<sup>th</sup> International Symposium on Search-based Software Engineering (SSBSE): Challenge Track, 2016. Raleigh, NC, USA.
- C. Ragkhitwetsagul, J. Krinke, D. Clark. Similarity of Source Code in the Presence of Pervasive Modifications. In 16<sup>th</sup> IEEE International Working Conference on Source Code Analysis and Manipulation (SCAM), 2016. Raleigh, NC, USA.
- C. Ragkhitwetsagul. Measuring Code Similarity in Large-scaled Code Corpora. In 32<sup>nd</sup> International Conference on Software Maintenance and Evolution (ICSME): Doctoral Symposium, 2016. Raleigh, NC, USA.

#### Workshops

N. Assavakamhaenghan, M. Choetkiertikul, S. Tuarob, R. G. Kula, H. Hata, C. Ragkhitwetsagul, T. Sunetnanta, and K. Matsumoto. *Software Team Member Configurations: A Study of Team Effectiveness in Moodle*, in the 10th International Workshop on Empirical Software Engineering in Practice (IWESEP 2019), Tokyo, Japan

- T. Sakulniwat, R. G. Kula, C. Ragkhitwetsagul, M. Choetkiertikul, T. Sunetnanta, D. Wang, T. Ishio and K. Matsumoto. *Visualizing the Usage of Pythonic Idioms Over Time: A Case Study of the with open Idiom*, in the 10th International Workshop on Empirical Software Engineering in Practice (IWESEP 2019), Tokyo, Japan
- V. Arammongkolvichai, R. Koschke, C. Ragkhitwetsagul, M. Choetkiertikul, T. Sunetnanta. *Improving Clone Detection Precision using Machine Learning Techniques*, in the 10th International Workshop on Empirical Software Engineering in Practice (IWESEP 2019), Tokyo, Japan
- C. Ragkhitwetsagul, J. Krinke. A picture is worth a thousand words: code clone detection based on image similarity. *In the 12<sup>th</sup> International Workshop on Software Clones (IWSC 2018)*, 2018. Campobasso, Italy
- C. Ragkhitwetsagul, J. Krinke. Using Compilation/Decompilation to Enhance Clone Detection. In 11<sup>th</sup> International Workshop on Software Clones, 2017. Klagenfurt, Austria

# **Technical Reports**

C. Ragkhitwetsagul, J. Krinke, R. Oliveto. Awareness and Experience of Developers to Outdated and License-Violating Code on Stack Overflow: An Online Survey. *UCL Computer Science Research Note (RN/17/10)*, 2017.