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## **Interactive scalable condensation of reverse engineered UML class diagrams for software comprehension**

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### **Citation**

Osman, M. H. B. (2015, March 10). *Interactive scalable condensation of reverse engineered UML class diagrams for software comprehension*. Retrieved from <https://hdl.handle.net/1887/32210>

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**Note:** To cite this publication please use the final published version (if applicable).

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**Title:** Interactive scalable condensation of reverse engineered UML class diagrams for software comprehension

**Issue Date:** 2015-03-10

# List of Publications

Below is the list of publications, which were (main) authored during this Phd research:

1. Hafeez Osman and Michel R.V. Chaudron (2011) **An Assessment of Reverse Engineering Capabilities of UML Case Tools**. In *Proceedings of the 2nd Annual International Conference on Software Engineering and Applications (SEA 2011)*, pages 7-12, Singapore [Chapter 4]
2. Hafeez Osman and Michel R.V. Chaudron (2012) **Correctness and Completeness of CASE tools in Reverse Engineering Source Code into UML Model**. *GSTF Journal on Computing vol.2, num.1*, pages 193-201 [Chapter 4]
3. Hafeez Osman, Michel R.V. Chaudron and Peter van der Putten (2012) **Classify- ing Presence of Classes in UML Design using Software Metrics**. In *Proceedings of the 21st Belgian-Dutch Conference on Machine Learning (BENELEARN 2012)*, page 76, Ghent, Belgium
4. Hafeez Osman, Arjan van Zadelhoff, Dave R. Stikkolorum and Michel R.V. Chaudron (2012) **UML Class Diagram Simplification: What is in the Developer's Mind?** In *Proceedings of the 2nd International Workshop on Experience and Empirical Studies in Software Modelling (EESSMod 2012)*, pages 31-36, Innsbruck, Austria [Chapter 5]
5. Hafeez Osman, Arjan van Zadelhoff and Michel R.V. Chaudron (2012) **UML Class Diagram Simplification - A Survey for Improving Reverse Engineered Class Diagram Comprehension**. In *Proceedings of the 1st International Conference on Model-Driven Engineering and Software Development (MODELSWARD 2013)*, pages 291-296, Barcelona, Spain [Chapter 6]
6. Hafeez Osman, Michel R.V. Chaudron and Peter van der Putten (2013) **An Analysis of Machine Learning Algorithms for Condensing Reverse Engineered Class Diagrams**. In *Proceedings of the 29th International Conference on Software Maintenance (ICSM 2013)*, Eindhoven, the Netherlands [Chapter 7]

7. Hafeez Osman and Michel R.V. Chaudron (2013) **UML Usage in Open Source Software Development : A Field Study**. In *Proceedings of the 3rd International Workshop on Experience and Empirical Studies in Software Modelling (EESSMod 2013)*, pages 23-32, Miami, USA [Chapter 3]
8. Hafeez Osman, Michel R.V. Chaudron and Peter van der Putten (2014) **Interactive Scalable Abstraction of Reverse Engineered UML Class Diagrams**. In *Proceedings of the 21st Asia-Pacific Software Engineering Conference (APSEC 2014)*, Jeju, Korea [Chapter 9 and 10]
9. Hafeez Osman, Michel R.V. Chaudron and Peter van der Putten (2014) **Condensing Reverse Engineered Class Diagrams through Class Name Based Abstraction**. In *Proceedings of the 2014 World Congress on Information and Communication Technologies (WICT)*, Malacca, Malaysia [Chapter 8]

The following is the publication which were co-authored and are related to this thesis. However, these works are not included (in this thesis) due to secondary contribution.

10. Ferdian Thung, David Lo, Hafeez Osman and Michel R. V. Chaudron (2014) **Condensing Class Diagrams by Analyzing Design and Network Metrics using Optimistic Classification**. In *Proceedings of the 22nd International Conference on Program Comprehension (ICPC 2014)*, Hyderabad, India
11. Truong Ho Quang, Michel R.V. Chaudron, Ingimar Samúelsson, Jól Hjalton, Bilal Karasneh and Hafeez Osman (2014) **Automatic classification of UML Class diagrams from images**. In *Proceedings of the 21st Asia-Pacific Software Engineering Conference (APSEC 2014)*, Jeju, Korea

# Acknowledgments

Over the past four years, many people and organizations have contributed to the completion of this thesis. First and foremost, I want to thank my sponsor, the government of Malaysia, for giving me the opportunity to enhance my knowledge and experience through this Ph.D journey. I wish the knowledge that I have gained through this journey would benefit our lovely country.

*To my colleagues (and ex-colleagues) in Software Engineering Section, LIACS:* Ana Fernandez, Ariadi Nugroho, Bilal Karasneh, Dave Stikkolorum, Ramin Etemaadi and Werner Heijstek. Thank you for your kind advice and non-stop support to this research (also regarding living in the Netherlands). I feel really fortunate to be part of this group.

*My roommates in LIACS:* Ali Mirsoleimani and Ben Ruijl. Thanks for the support and advice. I enjoyed our 'lunch meetings' and discussions.

*LIACS students:* Arjan van Zadelhoff, Wei Liu and Mahya Mirtar. Thank you for helping me with the research and the tool. Other LIACS (ex-)members: I would like to thank Mohamed Bamakhrama, Mohamed Tlais, Abdel, ShengFa, Ricardo, Rafael, Alex, Di Liu, Jelena, Emanuel, Asep Maulana, Frank and Marijn. Also, I would like to thank other LIACS members that participate in the survey and experiments in this research. Thank you for your time and efforts.

*To my friends in Chalmers:* Abdullah, Truong, Antonio, Imed, Håkan and Grisha, thank you for helping me with the research experiments, research collaborations and your warm welcome during my visits there.

I also want to take this opportunity to express my gratitude to our collaborator, Dr. David Lo and Ferdian Thung from Singapore Management University. Thank you for your ideas on how to improve the method invented in this research.

*To (ex-) Malaysian In Leiden:* Thank you Zuwairi and Farah, Liew and Wong, Hidayah, Che Zuhaida, Fadzrul and Zarina, Dennis and Kak Emma, Casper and Kak Jie, Dr.

Azman and Dr. Nik, Norlela, Naquiuddin, Yuvendran, Shafa'atussara, Syibli and Alia, Roslina and Zaleha. I am glad to be part of our Malaysia family here.

*To my family:* My parents, Khelah Mohd Idris, Osman Hassan, and Zaiton Sharif, also my parents-in-law, Jamaludin Bador and Aznor Yacob, thank you for your prayers, love and support. I would like to thank my sisters Hafeza and Insyirah, and my brother Fakhri for their prayers and for taking a good care of our lovely mother while I am not around.

The biggest thank you is to my lovely wife, Normal Aznita. I really appreciate your patience, understanding and sacrifice. Thank you for completing my life. Last but not least, I would like to thank my kids, Ash-Syifa and Firas for always throw me their lovely smile that always makes me happy.

*Mohd Hafeez Osman*  
Leiden, March 2015

# About the Author

Mohd Hafeez Osman was born on April 20, 1979 in Ipoh, Malaysia. He graduated his B.Sc. (hons) in Computer Science (major: computer system) from the University Teknologi Malaysia (UTM) in 2001. Then, he immediately continues his study and graduated his M.Sc. in Computer Science – Real Time Software Engineering in 2003 from the same university.

His first employment was in August 2002 as a software engineer for a software company. After working for several companies, in 2004, he started working as the Information Technology (I.T.) Officer for the government of Malaysia. After being working for eight years in the I.T. industry, he received a Malaysian Government Federal Training Award (HLP). This award allows him to take a four years study leave with a full Ph.D scholarship. On September 2010, he started his Ph.D journey at Leiden Institute of Advanced Computer Science (LIACS), under the supervision of Prof. Dr. Michel R.V. Chaudron and Dr. Peter van der Putten.

After finishing his Ph.D study, Hafeez will resume his job as the I.T. officer for the Malaysia government and continue his interest in Software Engineering, Artificial Intelligence and Computer Networks.