2012 6th International Workshop on Software Clones

(IWSC 2012)

Zurich, Switzerland
4 June 2012
# TABLE OF CONTENTS

An Accurate Estimation of the Levenshtein Distance Using Metric Trees and Manhattan Distance .......................................................... 1
   Thierry Lavoie, Ettore Merlo

A Novel Approach Based on Formal Methods for Clone Detection .......................................................... 8
   Antonio Cuomo, Antonella Santone, Umberto Villano

Claims and Beliefs about Code Clones: Do We Agree as a Community? A Survey ........................................ 15
   Debarshi Chatterji, Jeffrey C. Carver, Nicholas A. Kraft

Clone Detection Using Rolling Hashing, Suffix Trees and Dagification: A Case Study ........................................ 22
   Mikkel Jønsson Thomsen, Fritz Henglein

Dispersion of Changes in Cloned and Non-cloned Code .......................................................... 29
   Manishankar Mondal, Chanchal K. Roy, Kevin A. Schneider

Java Bytecode Clone Detection via Relaxation on Code Fingerprint and Semantic Web Reasoning ........ 36
   Iman Keivanloo, Chanchal K. Roy, Juergen Rilling

Mining Object-Oriented Design Models for Detecting Identical Design Structures .................................................. 43
   Umut Tekin, Ural Erdemir, Feza Buzluca

Safe Clone-Based Refactoring through Stereotype Identification and Iso-Generation .............................................. 50
   Nic Volanschi

A Case Study on Applying Clone Technology to an Industrial Application Framework .................................. 57
   Eray Tüzuen, Emre Er

A Method for Proactive Moderation of Code Clones in IDEs .......................................................... 62
   Radhika D. Venkatasubramaniam, Himanshu Kumar Singh, K. Ravikanth

Industrial Application of Clone Change Management System .......................................................... 67
   Yuki Yamakawa, Eunjong Choi, Norihiro Yoshida, Katsuro Inoue, Tateki Sano

A Common Conceptual Model for Clone Detection Results .......................................................... 72
   Cory J. Kapser, Ian Harder, Ira Baxter

Conte* Clones or Re-thinking Clone on a Call Graph .......................................................... 74
   Toshihiro Kamiya

Filtering Clones for Individual User Based on Machine Learning Analysis .......................................................... 76
   Jiachen Yang, Keisuke Hotta, Yoshihiko Higo, Hiroshi Igaki, Shinji Kasumoto

Near-Miss Model Clone Detection for Simulink Models .......................................................... 78
   Manar H. Alalfi, James R. Cordy, Thomas R. Dean, Matthew Stephan, Andrew Stevenson

Semantic Clone Detection Using Method IOE-Behavior .......................................................... 80
   Rochelle Elva, Gary T. Leavens

Shuffling and Randomization for Scalable Source Code Clone Detection .......................................................... 82
   Iman Keivanloo, Chanchal K. Roy, Juergen Rilling, Philippe Charland

Towards Qualitative Comparison of Simulink Model Clone Detection Approaches ................................ 84
   Matthew Stephan, Manar H. Alalfi, Andrew Stevenson, James R. Cordy

Using Edge Bundle Views for Clone Visualization .......................................................... 86
   Benedikt Hauptmann, Veronika Bauer, Maximilian Junker

We Have All of the Clones, Now What? Toward Integrating Clone Analysis into Software Quality Assessment .......................................................... 88
   Wei Wang, Michael W. Godfrey

What Clone Coverage Can Tell .......................................................... 90
   Nils Goede, Benjamin Hummel, Elmar Juergens

Ctcompare: Code Clone Detection Using Hashed Token Sequences .......................................................... 92
   Warren Toomey

Experience of Finding Inconsistently-Changed Bugs in Code Clones of Mobile Software .......................................................... 94
   Katsuro Inoue, Yoshihiko Higo, Norihiro Yoshida, Eunjong Choi, Shinji Kasumoto, Kyonghwan Kim, Wonjin Park, Eunha Lee

Visualizing Code Clone Outbreak: An Industrial Case Study .......................................................... 96
   Kentaro Yoshimura, Ryota Mibe

Author Index