

Roger Lee (Ed.)

Software Engineering, Artificial Intelligence, Networking and
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Preface

The purpose of the 11th Conference on Software Engineering, Artificial Intelligence, Networking, and Parallel/Distributed Computing (SNPD 2010) held on June 9 – 11, 2010 in London, United Kingdom was to bring together researchers and scientists, businessmen and entrepreneurs, teachers and students to discuss the numerous fields of computer science, and to share ideas and information in a meaningful way. Our conference officers selected the best 15 papers from those papers accepted for presentation at the conference in order to publish them in this volume. The papers were chosen based on review scores submitted by members of the program committee, and underwent further rounds of rigorous review.

In Chapter 1, Cai Luyuan et al. Present a new method of shape decomposition based on a refined morphological shape decomposition process.

In Chapter 2, Kazunori Iwata et al. propose a method for reducing the margin of error in effort and error prediction models for embedded software development projects using artificial neural networks (ANNs).

In Chapter 3, Viliam Šimko et al. describe a model-driven tool that allows system code to be generated from use-cases in plain English.

In Chapter 4, Abir Smiti and Zied Elouedi propose a Case Base Maintenance (CBM) method that uses machine learning techniques to preserve the maximum competence of a system.

In Chapter 5, Shagufta Henna and Thomas Erlebach provide a simulation based analysis of some widely used broadcasting schemes within mobile ad hoc networks (MANETs) and propose adaptive extensions to an existing broadcasting algorithm.

In Chapter 6, Qinglei Zhang et al. combine two machine learning techniques – Support Vector Machine (SVM) and Ant Colony Optimization (ACO) – to try to capitalize on the benefits of each and minimize the drawbacks.

In Chapter 7, Harry Goldingay and Jort van Mourik propose an evolutionary multi-agent algorithm to solve a mail problem in various environments.

In Chapter 8, Chowdhury Farhan Ahmed et al. propose a new tree structure for data mining called High Utility Stream tree (HUS-tree) along with a novel algorithm called High Utility Pattern Mining over Stream data (HUPMS) to help solve the problems of existing algorithms.

In Chapter 9, Mohammad Abid Khan et al. present a rule-based algorithm for the resolution of sluices occurring in dialogue.

In Chapter 10, Daniel Demski and Roger Lee explore possible improvements for touchscreen and stylus gesture input functionality through making gestures more context-based, dynamic, and interactive.

In Chapter 11, Alper Ozcan and Sule Gunduz Oguducu design the framework of a recommendation system for mobile service providers, allowing customers to request recommendations from their mobile devices for restaurants, among other possibilities.

In Chapter 12, Jihen Majdoubi et al. propose a contribution for conceptual indexing of medical articles by using the Medical Subject Headings (MeSH) thesaurus and using a language model to index articles with MeSH headings.

It is our sincere hope that this volume provides stimulation and inspiration, and that it will be used as a foundation for works yet to come.

June 2010

Jixin Ma
Liz Bacon
Wencai Du
Miltos Petridis

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