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PART V

The Denotational Semantics of Signal Statement in ATLAS.....	116
<i>De-gui Guo and Lei Liu</i>	
Using WQM for Classifying Usability Metrics.....	117
<i>Victor Penichet, Coral Calero, M. Dolores Lozano and Mario Piattini</i>	
Transformation of Grammars with Precedence.....	118
<i>Sheng-Jun Wang and Cheng-Zhi Jin</i>	
Hybrid-Component Code Generation based on XMI in the HYREP.....	119
<i>HanYong Choi and YongJae Song</i>	
Design of Translator for Efficient Stack-Based Codes from 3-Address Codes in CTOC.....	120
<i>Young Kook Kim, Ki-Tae Kim, Sun-Moon Jo and Weon-Hee Yoo</i>	
An Enhanced Complexity Measurement Technique for Object-Oriented Reverse Engineering.....	121
<i>Jongwan Kim and Chong-Sun Hwang</i>	
Analysis and Formalization of Dynamic Class Loading in Java.....	122
<i>Ki-Tae Kim, Kyung-Soo Kim, Hoon-Joon Kouh and Weon-Hee Yoo</i>	
Conversion of the popular pc game for a mobile game development.....	123
<i>Dae-Hyuck Park and YoungHwan Lim</i>	
Extending the software development process with Design Components....	124
<i>Woon-Yong Kim, Young-Chul Kim and Yong-Keun Choi</i>	
Short Term Stock Trend Prediction Using Neurofuzzy Predictors.....	125
<i>Mohammadreza Sadri, Farzad Habibipou and Mahdi Jalili-Kharaajoo</i>	
CSDE - AI Semantic Diagnosing Support for CORBA Component Model.	126
<i>Jie Huang, Lin Chen, Yan Jia and Peng Zou</i>	
Stochastic Programming via Monte Carlo Sampling.....	127
<i>Takayuki Shiina</i>	
Classifying Internet Traffic using Linear Regression.....	128
<i>Troy Mackay and Robert Baker</i>	
An Analysis of Performance Comparison for Base Station Controller with Protocol Difference.....	129
<i>Lim Seogku, Hong Keongho and Jeong Eunhwa</i>	
Characterization of SPEC CPU2000: Performance and Clock Speed.....	130

Extending the software development process with Design Components

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Abstract. In the software development process, the use of design patterns can construct the system with reusability and stability. But although it has many advantages, the design patterns mainly are used by a view of reconstruction and non-formal. Therefore, it is difficult to composite of design patterns in the development process efficiently. So, we propose the efficient software development process with design pattern components. For this, we define the formal structure of the design pattern component, and present the development process based on design components. The use of design components in development process can be increase a reusability of design pattern's information and construct more reliable and stable system. Moreover it can be concentrated upon the problem of domain without to consider design pattern itself.

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