

2007 First International Workshop on the Economics of Software and Computation

(ESC 2007)

**Minneapolis, Minnesota, USA
20 – 26 May 2007**



**IEEE Catalog Number: CFP0700D-PRT
ISBN: 978-0-7695-2955-4**

Proceedings



ICSE 2007 Workshops

Table of Contents

First International Workshop on the Economics of Software and Computation (ESC 2007)

Workshop Organization

An Economic Model for Software Architecture Decisions	1
<i>Paul C. Clements</i>	
Using Economics as Basis for Modelling and Evaluating Software Quality	4
<i>Stefan Wagner</i>	
Economics-Driven Software Mining	8
<i>Rami Bahsoon and Wolfgang Emmerich</i>	
Balanced Decision Making in Software Engineering—General Thoughts and a Concrete Example from Industry	13
<i>Hannes Omasreiter</i>	
Quality-Attribute Based Economic Valuation of Architectural Patterns	17
<i>Ipek Ozkaya, Rick Kazman, and Mark Klein</i>	
A Simple Estimate of the Cost of Software Project Failures and the Breakeven Effectiveness of Project Risk Management	20
<i>Stephen P. Masticola</i>	
Toward a Calculus of Confidence	24
<i>Christopher Scaffidi and Mary Shaw</i>	
Valuating Software Service Development: Integrating COCOMO II and Real Options Theory	27
<i>Brendan Tansey and Eleni Stroulia</i>	
Computation Cost in Grid Computing Environments	30
<i>Enis Afgan and Purushotham Bangalore</i>	
Author Index	