



COLLEGE OF ENGINEERING AND COMPUTER SCIENCE

FLORIDA ATLANTIC UNIVERSITY

Announces the Ph.D. Dissertation Defense of

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for the degree of Doctor of Philosophy (Ph.D.)

“Patterns for Enterprise Application Design and Development”

Nov. 6, 2017, 1 p.m.
Engineering East, Room 405
777 Glades Road
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DEPARTMENT:

Computer and Electrical Engineering and Computer Science

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ABSTRACT OF DISSERTATION

Patterns for Enterprise Application Design and Development

The enterprise applications of today are typically complex, scalable, distributed, and often mission-critical. They are expected to be high performance, and be able to handle large volumes of data and a large number of concurrent users. Enterprise applications are deployed on multiple platforms and across corporate networks. These applications are built to be data-centric and user-friendly, with a high degree of security. At the same time they are expected to have low administration and maintenance costs.

Designing and developing enterprise applications is a complex and resource intensive process, as it often must address thousands of requirements. At the same time, the software architecture of most enterprise applications at their core have many features and structures in common. Designers from different teams do not normally share design elements because of the competitive and proprietary nature of development, and enterprise applications design and development teams end up re-inventing the wheel when tackling a new product.

My objective is to describe design patterns for enterprise application architectures that assist software architects with reusable solutions to improve design quality and productivity. I achieve this by presenting seven patterns, each providing a solution to a specific challenge or a problem that is common to many enterprise applications.

BIOGRAPHICAL SKETCH

Born in the Ukraine

B.S. 1994, Georgetown University, Washington, DC

M.S. 1998, American University, Washington, DC

Ph.D. 2017, Florida Atlantic University, Boca Raton, Florida

CONCERNING PERIOD OF PREPARATION & QUALIFYING EXAMINATION

Time in Preparation: 2011 - 2017

Qualifying Examination Passed: Spring 2012

Published Papers:

Rubis, Russ and Ionut Cardei, Versioning and Change History Patterns for Business Data Objects, *Pattern Languages of Programs Conference*, October 2015.

Rubis, Russ and Ionut Cardei, The Money Object Pattern, *Pattern Languages of Programs Conference*, October 2015.

Rubis, Russ and Ionut Cardei, Permission Based Granular Access Control Pattern, *Pattern Languages of Programs Conference*, September 2014.

Rubis, Russ and Ionut Cardei, Business Object Life Cycle Pattern, *Pattern Languages of Programs Conference*, September 2014.

Rubis, Russ and Ionut Cardei, The Dynamic Business Object Pattern, *Pattern Languages of Programs Conference*, October 2013.

Rubis, Russ and Ionut Cardei, Versioning and Change History Patterns for Enterprise Applications, *International Journal of Software Engineering, Technology and Applications (IJSETA)*, (Under Review).