Instructors' Certificates, Honors, Publications

Sun Certified Instructor:

- Java Programming Language

- Migrating to OO Programming with Java Technology
- Java Technology Architecture Planning and Design
- Developing Wireless Applications Using WAP/WML
- Java 2 Enterprise Edition
- Enterprise Java Beans
- Java Server Pages
- Java 2 Platform Enterprise Architecture
- Developing Java Servlets
- Capability Maturity Model for Software

Other Certifications:

- Sun Certified Java Architect
- Sun Certified Java Instructor
- Sun Certified Java Programmer
- Developing Java Card Applications
- Cyc Corp. Certified in Ontology and Knowledge Engineering
- Object Oriented Analysis and Design
- Geographical Information Systems
- Geographic Macro Language
- Oracle RDBMS, Advanced SQL
- Critical Thinking Teaching Methods

Yefim (Jeff) Zhuk, Honors, Patents and Publications

HONORS:

First Prize in Belarus for the best Real-Time System Development

"Teaching Excellence" award from University of Phoenix

"Hi-Five" award from Sun Educational Services for corporate consulting/training

"Boeing/Jeppesen Inventor 2007" and "Boeing/Jeppesen Special Inventor 2008" awards

US PATENTS: DISTRIBUTED KNOWLEDGE SYSTEMS AND TECHNOLOGIES

1. **Knowledge-Driven Architecture**, Yefim Zhuk, Streamlining development and driving applications with business rules & scenarios, US Patent, http://www.google.com/patents/US7774751

2. **Adaptive Robot System** with Knowledge-Driven Architecture, Yefim Zhuk, On-the-fly translations of situational requirements into adaptive robot skills, US Patent, http://www.google.com/patents/US7966093

3. Distributed Knowledge and Process system, Yefim Zhuk, The system allows negotiate multiple forms of collaboration, and contains sufficiently flexible levels of data security for online collaboration, US Patent, http://www.google.com.sv/patents/US7032006

4. Collaborative Security and Decision Making, Yefim Zhuk, transforming a beautiful idea of collaborative security decision making into a working system, US Patent, http://serviceconnect.org/

5. **Conversational Semantic Service Map**, Yefim (Jeff) Zhuk, The system for collaborative design, assembly on-the-fly, execution, benchmarking, and negotiation of computer services and applications by developers and subject matter experts, US Patent Pending.

6. Rules Collector system, Yefim Zhuk, Transforming "tribal knowledge" into formal rules to drive applications and business processes, US Patent, http://captureknowledge.org/

9 SU PATENTS: DATA PROCESSING AND PATTERN RECOGNITION (A61, G06, G11)

BOOKS:

IT OF THE FUTURE (AVAILABLE ONLINE)
BIG DATA AND COGNITIVE COMPUTING IN SEMANTIC CLOUD ARCHITECTURE

INTEGRATION-READY ARCHITECTURE AND DESIGN
Software Engineering with XML, Java, .NET, Wireless, Speech, and Knowledge Technologies
Cambridge University Press, ISBN 0521525837

THE MESSAGE FROM 2040
Science-fiction or almost true detective story about society and technology

ARTICLES:

FIXING EDUCATION
EDUCATION INEQUITY: A PROBLEM AND A SOLUTION

SOFTWARE SEMANTIC EVOLUTION
FROM CHAOS TO MONSTER APPS, TO SOA AND MICROSERVICES, TO RAML AND DATASENSE BY MULESOFT, AND THE NEXT STEP.

FROM BUSINESS AS USUAL TO KNOWLEDGE-DRIVEN ARCHITECTURE BY YEFIM (JEFF) ZHUK

SOA: WHAT, WHY, AND HOW BY YEFIM (JEFF) ZHUK

SEMINARS:
SOFTWARE EVOLUTION AND BEST PRACTICES IN SERVICE-ORIENTED ARCHITECTURE AND KNOWLEDGE ENGINEERING
Opening up a new world of applications that can inherit and learn rules, events, and scenarios.
Moving from IT to a Distributed Knowledge Marketplace.
Taught by Jeff Zhuk at IEEE Denver-Boulder and atCanterbury University, New Zealand, at IBM (Boulder Campus), Ball Corp., DeVry and University of Phoenix. The workshop connects Software and Knowledge Engineering and teaches to apply the latest technology to cut IT cost and improve efficiency.

INTEGRATED SOFTWARE AND KNOWLEDGE ENGINEERING
Integrated software and knowledge engineering � a platform for developing intelligent systems
Presented by Jeff Zhuk at Pacific Northwest National Laboratory (PNL), Richmond, WA

CONFERENCES:

MetaExpert Systems for Enterprises on Conversational Semantic Decision Support
Smart Data, San Jose.

Semantic Enterprise Architecture
Semantic Technologies and Business, San Francisco.

Distributed life in JXTA Knowledge Networks. (Intriguing and Unexpected: New and Cool
section)
JavaOne International Conference, BOF-1117, San Francisco

24x7 Distributed development method and technology.(Web Services section.)
JavaOne International Conference, BOF-1929, San Francisco

Integration Ready Systems. (Emerging technologies section.)
JavaOne International Conference, TS-1366, San Francisco

"Wireless Technologies: WAP and VoiceXML development"
WebCast (on-line) session (in partnerships with Sun Microsystems) for Java development
community

"Enterprise Application Development: technology and process"
WebCast (on-line) session (in partnerships with Sun Microsystems) for Java development
community

Wired and Wireless Telecom applications with Java.
Wireless One International Conference, p.8, Las Vegas,

Developing Telecommunication solutions using Java technology.
JavaOne International Conference, p.215, San Francisco,

Data access over the Internet. IPServe.com redefines collaboration.
Oracle Conference: RMOUG Training Days, p.347, Denver,

PUBLICATIONS IN THE FIELD OF EXPERIMENTAL MEDICINE:

Biological Age Modeling and Experimental MeasurementT. Dubina, V. Dyundicova, Y. Zhuk.
In the book �Biological Aging Measuring� by Ward Dean. p.147. Los Angeles 1988

Defining the biological age of an individual and the degree of aging. A. Mints, T. Dubina, V.
Lysenyk, Y. Zhuk. �Physiological Zhurnal� Vol. 30, No. 1, p. 39 1984

PUBLICATIONS IN FIELDS OF DIGITAL SYSTEMS AND SOFTWARE ENGINEERING.

REAL-TIME SYSTEMS AND EXPERIMENTAL SCIENCE:

Programming technology and architecture for personal microcomputer systems. Yefim Zhuk, In the book "Industrial technology for software use and design" Moskow 1984 p137

Neuropsychological experiment: Real-time multi-channel control and functional diagnostics with microcomputer system. Yefim Zhuk, In the book "Scientific research and control computing" Minsk 1984 page 55

From Book Reviews:

�This is the new road map for a new generation of students and specialists dedicated to the field of IT and computer information systems" - Dr. V. Genin, Plenipotentiary Representative of the International Academy of Higher Education in the United Nations, Chair of College of Business Management and IT at University of Phoenix

�This book brings software engineering newbies as well as experts in this area up to date with the latest technologies, software scalability, and integration issues. It will definitely help us create a bridge between software engineering and knowledge-based technologies� -Professor V. O. Safonov, Ph.D., head of the laboratory of Java Technology, St. Petersburg University, Russia

"An impressive attempt to re-define software and knowledge engineering for the "post-dotcom" era." � V. Kaptelinin, Ph. D., Department of Informatics, Ume University, Sweden

�The book is a brilliant synergy of theory and experience. Filled with fundamental concepts together with innovative and yet very practical approaches to modern software engineering, it answers the most important questions of today and allows us to look into the future.� � A. Nozik, General Director, Specialized Engineering, Integration, and Automation Company, SZMA

"Broadly relevant and applicable, what a useful book... I really appreciate the book. I'm surprised how relevant it is to the work that I'm now doing in knowledge management and information systems architecture. Also, I've enjoyed how many of my favorite quotes are. What impressed me the most was your ability to address a range of audiences, from conceptual introduction to practical coding, all in one book. That helps my exec clients and code warriors all start to speak a common language. Thank you." - BookPool.com review

"This book was very solid technically, and a fascinating read. On the development side, it is filled with ideas and examples, some of which showed me completely different approaches to common problems. Conceptually, the book is even richer, not only explaining complex technologies in simple ways, but showing how some seemingly unrelated technological developments from the past few years can fit and work together. Overall, I think the book's most worthwhile aspect is the way it married its overall vision, which anticipates the future of integration and knowledge-driven computing, with very specific design and code examples that I could incorporate into my practice right away. A top book for people who want to stay ahead of the pack in the latest practical developments that will shape information architecture for the future. - Amazon.com review