

**YEDITEPE UNIVERSITY
DEPARTMENT OF COMPUTER ENGINEERING**

SEMINAR

A Review of Distributed Computing Paradigms

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Abstract

The continuing development in chip technology accompanied with rapid development of high speed networks not only paves the way for more powerful computers, but also leads to the increase importance of the distributed computing paradigms and the apparition of new ones. Modern computing infrastructure is not limited to PCs and laptops, computer clusters and networks, high-performance servers and massively parallel computer systems, but also smart phones and tablets, smart sensors and wearable devices which are available for billions of users offering high computing performances at low cost and interconnected via Internet and IoT.

This talk aims to review the most important distributed computing paradigms and the principal similarities and differences between them, as well as take a quick look into the future of the post-cloud computing era. A brief distributed computing road map presented in this overview would be useful for students, researchers, and commercial users.

* Dr. Peter Panfilov is a professor of computer systems and networks within the Department of business informatics in the Graduate School of Business at the HSE University of Moscow, Russia, where he teaches various computer engineering and computer science courses and serves a member of academic council of the master's programme into Business Analytics and Big Data Systems. He graduated from Moscow Institute of Electronic Machine Building (MIEM) of Moscow, Russia in 1982 and received his PhD from the Institute of Control Sciences of Russian Academy of Sciences (ICS RAS), Moscow, Russia in 1992. He worked as an associate professor (doçent) in the Department

of Computer Engineering at Yeditepe University, Istanbul, Turkey from 2005-2008. He became a professor in the Department of Computer Systems and Networks at his home university the MIEM in 2009. Dr Panfilov has over 100 refereed publications at reputable venues. His research interests and activities lie at the interface of Computer Science, Computer Engineering and Data Science, with a focus on distributed systems combining data science techniques and parallel computing models applied to real world problems. He has been awarded grants as principal investigator and researcher from the European Commission's 7th Framework Programme, the Russian Foundation for Basic Research (RFBR), and the Russian Foundation for Support of Small Innovative Enterprises (FASIE). Dr Panfilov is the vice-president of the Russian Chapter of the Association for Information Systems (AIS). He is co-chair of the International Conference Series on Digitalization of Society, Economics, Management and Education (DSEME) and a Member of programming and steering committees of number of international scientific event such as CODiT, DAAAM Symposia, ICCTA etc.