Name Sergey Orekhov

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**Nationality** Ukraine

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# **PROFESSIONAL AND ACADEMIC POSITIONS:**

2004 – to current Associate Professor, Department of Software Engineering and Management

Intelligent Technologies (before 2022 – Department of Software Engineering and Management Information Technologies), Educational and Scientific Institute of Computer Science and Information Technologies (before 2022 – Faculty of Computer

Science and Software Engineering), National Technical University "Kharkiv

Polytechnic Institute";

2001 – 2004 Senior Lecturer, Department of Automated Control Systems, National Technical

University "Kharkiv Polytechnic Institute";

1997 – 2001 Assistant, Department of Automated Control Systems, Kharkiv State Polytechnic

University;

### **EDUCATION:**

Ph.D. (Technical) (December, 2001) National Technical University "Kharkiv Polytechnic Institute", Kharkiv, Ukraine

Speciality: 05.13.06 – Information Technologies

Master's Degree (Accounting and Bookkeeping, 5 years, Honors Diploma) (June, 2000) Kharkiv State

Economic University, Kharkiv, Ukraine

Concentrations: Master of Business Administration

Engineer's Degree (Information Management Systems and Technologies, 5 years, Honors Diploma) (June,

1997) Kharkiv State Polytechnic University, Kharkiv, Ukraine

Concentrations: Engineer-Systems Analyst

#### **COURSES TAUGHT**

Extensive teaching at all university levels: Bachelor/Master:

- Information retrieving and semantic web (in English, Bachelor);
- Software testing (in English, Bachelor/Master);
- Internet of things (in English, Bachelor);

## **FIELDS OF RESEARCH INTEREST:**

- Web intelligent systems;
- Search Engine optimization;
- Web programming;
- Data mining and Data warehousing.

#### **SUMMARY OF CAREER ACHIEVEMENTS**

Prepared and published more than 30 research papers and textbooks (ORCID: <a href="https://orcid.org/0000-0002-5040-5861">https://orcid.org/0000-0002-5040-5861</a>; Scopus: <a href="https://www.scopus.com/authid/detail.uri?authorId=57210618400">https://www.scopus.com/authid/detail.uri?authorId=57210618400</a>;

#### **PROFESSIONAL MEMBERSHIPS:**

- Full member of the Public Organization "Ukrainian Scientific and Educational IT Society" (2019 to present), Ukraine

### **RELATED PUBLICATIONS**

### Papers (Scopus)

- 1. Orekhov, S., Malyhon, H., Goncharenko, T. Mathematical model of semantic kernel of WEB site // CEUR Workshop Proceedingsthis link is disabled, 2021, 2917, pp. 273–282.
- 2. Kopp, A., Orlovskyi, D., Orekhov, S. An approach and software prototype for translation of natural language business rules into database structure // CEUR Workshop Proceedingsthis link is disabled, 2021, 2870, pp. 1274–1291
- 3. Orekhov, S., Malyhon, H., Stratienko, N., Goncharenko, T. Software development for semantic kernel forming // CEUR Workshop Proceedingsthis link is disabled, 2021, 2870, pp. 1312–1322
- 4. Orekhov, S., Malyhon, H., Liutenko, I., Goncharenko, T. Using internet news flows as marketing data component // CEUR Workshop Proceedingsthis link is disabled, 2020, 2604, pp. 358–373
- 5. Godlevsky, M., Orekhov, S., Orekhova, E. Theoretical fundamentals of search engine optimization based on machine learning // CEUR Workshop Proceedingsthis link is disabled, 2017, 1844, pp. 23–32
- Kopp A., Orekhov S., Orlovskyi D. Towards an Approach to Organization of Decentralized Business Process Model Repository. CEUR Workshop Proceedings, 2022. Vol. 3132. P. 186–197
- 7. Kopp A., Orekhov S., Orlovskyi D. Map of Virtual Promotion of a Product. Advances in Intelligent Systems, Computer Science and Digital Economics III. Lecture Notes on Data Engineering and Communications Technologies. Switzeland: Springer Nature, 2022. Vol. 121. P. 81–91
- 8. Orekhov S. Analysis of Virtual Promotion of a Product. Lecture Notes in Networks and Systems. Switzeland: Springer, 2022. Vol. 463. P. 3–13
- 9. Orekhov S., Malyhon H. Method for Synthesizing the Semantic Kernel of Web Content. CEUR Workshop Proceedings, 2022. Vol. 3171. P. 127–137
- 10. Orekhov S. Advanced Method of Synthesis of Semantic Kernel of E-content. CEUR Workshop Proceedings, 2022. Vol. 3312. P. 87–97
- 11. Orekhov S., Godlevsky M., Malyhon H., Goncharenko T. A New Method of Search Engine Optimization Based on Semantic Kernel Idea. In: Hu, Z., Ye, Z., He, M. (eds) Advances in Artificial Systems for Medicine and Education VI. AIMEE 2022. Lecture Notes on Data Engineering and Communications Technologies. Switzeland: Springer, Cham, 2023. Vol. 159. P. 67–77
- 12. Orekhov S. A New Approach to Search Engine Optimization Based on the Synthesis of a Virtual Promotion Map. CSDEIS 2022: Advances in Intelligent Systems, Computer Science and Digital Economics IV. Lecture Notes on Data Engineering and Communications Technologies. Switzeland: Springer, 2023. Vol. 158. P. 136–151