



Ministry of Education and Science of Ukraine

Odessa National Technological University

Institute of computer systems and technologies "Industry 4.0" after P.N. Platonov

**invite you and your colleagues to take part in the work  
XIV International scientific practical conference**

### «INFORMATION TECHNOLOGIES AND AUTOMATION– 2021»

to be held **October, 21-22, 2021**

**Conference languages:** English, Ukrainian and Russian.

#### ≡ PROBLEMS (SECTIONS) ≡

- Mathematical and computer modeling of complex processes
- Management, processing and protection of information
- Automation and process control
- New information technologies in education
- Design of information systems and software systems
- Computer telecommunication networks and technologies
- Artificial intelligence and automation of robotic systems
- Bibliometrics. Informatization of educational, scientific, research processes

#### Organizing committee

##### Chairman

**Yegorov B.V.**, prof. (Odessa, Ukraine)

##### Vice-chairmans:

**Povarova N.N.**, Assoc. (Odessa, Ukraine)

**Khobin V.A.**, prof. (Odessa, Ukraine)

**Kotlyk S.V.**, Assoc. (Odessa, Ukraine)

#### Members of the Committee:

- **Panagiotis Tzionas, prof.** (Thessaloniki, Greece)
- **Qiang Huang, prof.** (Los Angeles CA, USA)
- **Yangmin Li, prof.** (Macao, China)
- **Artemenko S.V., prof.**, (Odessa, Ukraine)
- **Romanyuk A.N., prof.** (Vinnitsa, Ukraine)
- **Grabko V.V., prof.** (Vinnitsa, Ukraine)

- **Yegorov V.B., prof.** (Odessa, Ukraine)
- **Zhuchenko A.I., prof.** (Kiev, Ukraine)
- **Kupriyanov A.B., Assoc.** (Minsk, Belarus)
- **Ladaniuk A.P., prof.** (Kiev, Ukraine)
- **Lysenko V.F., prof.** (Kiev, Ukraine)
- **Liubchik L.M., prof.** (Kharkov, Ukraine)
- **Montic P.N., prof.** (Odessa, Ukraine)
- **Palov I., prof.** (Rousse, Bulgaria)
- **Plotnikov V.M., prof.** (Odessa, Ukraine)
- **Stovkova V.D., Assoc.** (Trakia, Bulgaria)
- **Suslov V., prof.** (Koszalin, Poland)
- **Trishin F.A., Assoc.** (Odessa, Ukraine)

#### **The list of materials that are sent:**

- An application for participation (a sample is attached, an application is made for all authors of abstracts, submitted electronically for each participant), or registration in a [Google form](#);
- the text of the abstracts (according to the requirements that are attached, the volume of the abstracts is up to three A4 pages).

**Important Dates:13.10.2021** The deadline for paper registration

#### **Contacts**

Phone: (048) 712-40-00

e-mail: [itia21529@gmail.com](mailto:itia21529@gmail.com)

**For foreign participants, participation in the conference is free.**

### **REQUIREMENTS FOR REGISTRATION OF ABSTRACTS**

Authors are responsible for observance of legislative requirements for publication of materials in the open press.

All papers have to be written using *Microsoft Office Word*. Page Setup: margins (Top, Bottom, Left, Right – 2.3 cm each), orientation – portrait, paper size – A4. Font: **Times New Roman**; font style – regular; font-size – 12 pt. Paragraph: alignment – justified, line spacing – single; indentation special – 0.9 cm. Papers have to be **maximum 3 pages long**, written in correct English.

Material placement order:

- UDC - on the left without a paragraph in the top line; name - through a line in capital letters with alignment in the center; surnames and initials of the authors - in the next line, separated by commas, aligned to the right (academic degrees, scientific ranks and titles are not included), E-mail for communication in brackets; the full name of the enterprises in which the work was carried out, and in parentheses, the country in the next line, aligned to the right;
- The abstract of the paper is given a line after the title, using italics (from 2 to 15 lines).
- The body text begins after a blank line from the abstract. It must contain statement of a problem, enumeration of the solving issues, a statement of a research essence and the formulation of conclusions which have to correspond to an objective. REFERENCES

(quoted literature and other sources) are listed at the end of the paper a line after the body text, according to IEEE. Tables have to be incorporated in the text without turn and have to be supplied with captions. References to tables are given in a short form (tab.)

- In equations and alphabetic references only the roman type must have an inclination (except for trigonometrical functions, brands and names). Only those formulas on which there are links in the text are numbered.
- Formulas are centered and without indentation.
- Figures are inserted into the text and must have captions.

*An example of abstracts:*

UDC 621.865:004.896

**DEVELOPMENT OF AN AUTOMATIC CONTROL SYSTEM FOR THE SELF-ADAPTING GRIPPER**

**Habuiev K.O., Yehorov V.B.** (mashaboicova@gmail.com, boltach.svetlana@gmail.com)

*Odessa National Academy of Food Technologies (Ukraine)*

*The relevance of developing a control system for the self-adjustable gripper for the manipulator robot was considered. The main trend in the development of modern gripper devices for robots is considered. The approach under consideration includes an aspect of industry 4.0, namely HRC (human robot collaboration), mechatronics modules. The main objective of the development is to improve the quality of the robot's handling of the object, while promoting HRC by minimising programming for the end user. The statistics/diagram of the main pick&place applications is also given.*

Today, robotics is rapidly gaining momentum in its development, and the number of cases for applying robotic solutions is increasing day by day. The use of robots in pick&place today accounts for the vast majority of all applications.....

.....

**References**

1. Jianshu Zhou<sup>1</sup>, Shu Chen, and Zheng Wang 2017 A Soft-Robotic Gripper With Enhanced Object Adaptation and Grasping Reliability, *IEEE robotics and automation letters*.

.....

**APPLICATION FORM**

it is necessary to provide in electronic form for each participant

First name, last name \_\_\_\_\_

Scientific rank \_\_\_\_\_

Academic degree \_\_\_\_\_

Title \_\_\_\_\_

Organization \_\_\_\_\_

Address \_\_\_\_\_

Phone, Fax \_\_\_\_\_

E-mail \_\_\_\_\_

Title of the report \_\_\_\_\_

Authors of the report \_\_\_\_\_

Number of section \_\_\_\_\_