Pavel Ianko

+39 351 739 80 85
pavel.ianko@studenti.unipd.it
github.com/PashaIanko
researchgate.net/Pavel_Ianko

Education

MSc, University of Padua — **Oct 2021 – Current**
Machine Learning for Intelligent Systems. — Padua, Italy
Current courses: Machine and Deep Learning, Statistical Learning, Cognition and Computation, Human Data Analytics

BSc, Novosibirsk State University — **Sep 2017 – Current**
*Physical Informatics. GPA 4.92 / 5.0 (**Top 7%**)* — Novosibirsk, Russia
Key courses: Computational physics, Machine learning, Data & signal processing, Discrete mathematics, Computer networks, Object-oriented programming, Software engineering, Mathematical analysis, Linear algebra

Work Experience

Research Intern, National Tsing Hua University — **Jun – Aug, 2019**
College of engineering, laboratory of Flexible Printronics — Hsinchu, Taiwan
Programmed a software application for image processing and assessing pattern irregularities for flexible printronics

Laboratory of Effective Usage of Reactor Facilities — **Sep 2017 – Current**
Kutateladze Institute of Thermophysics — Novosibirsk, Russia
Experimentally assessed mixing efficiency in microchannels
Processed data, presented results at conferences

Hackathon Experience

Skoltech University hackathon — **January 15-17, 2021**
Together with profi.ru web portal. Built Machine Learning model to recognize frauds on web sites. Special prize winner link — Moscow, Russia

International Winter School, Machine Learning in Robotics — **December 7-10, 2020**
Reinforcement learning course link — Kazan, Russia

Deep Learning Workshop — **April – May, 2020**
Key topics practiced: YOLO, MMDetection frameworks, instance segmentation, transfer learning link — Novosibirsk, Russia

Programming Skills

C, C++, OS UNIX – *accomplished university courses*
Matlab – *developed a GUI application for summer internship research*
R – *university course on statistical learning*
Python – *accomplished a software for Bachelor's degree project*

Patents

1. Markovich D.M., **Ianko P.E.,** Skrypkin S.G., Tsoy M.A., Kravtsova A.Y. Software for the automation of flowrate control for cavitation stand (link)

Diplomas & Awards

1. **57th International Scientific Student Conference.** April 14-19, 2019. 1st place (link)
2. **56th International Scientific Student Conference.** April 22-27, 2018. 3rd place (link)
3. **4th Russian School «Panoramic Methods for the Flow Diagnostics».** June 19-22, 2018 (link)
4. **53rd International Scientific Student Conference.** April 11-17, 2015. 1st place (link)
5. **Silver medal** at the 28th International Young Physicists' Tournament
   Nakhon Ratchasima, Thailand. June 27 – July 4, 2015 (link)
6. **Silver medal** at the 27th International Young Physicists' Tournament
   Shrewsbury, England. July 3 – 10, 2014 (link)

Language Skills

English CEFR level C1 (IELTS 8.0 overall band) (link)

Leadership & Scholarships

1. Excellence scholarship by University of Padua (16000 EUR for two years) (August 2021) (link)
2. Global Engineer Leadership Scholarship, National Tsing Hua University (15000 NTD) (July 2019) (link)
3. DAAD Scholarship for MSc students (Achieved, voluntarily declined) (July 2021) (link)

Journal Publications

1. Aleksandra Yu. Kravtsova, **Pavel E. Ianko**, Margarita V. Kashkarova, Arthur V. Bilsky, Igor V. Naumov. Investigation of the mixing in the T-micromixers at the different inlet flowrate relations // *Interfacial Phenomena and Heat Transfer* (link)
2. Kravtsova A. Yu., **Ianko P. E.**, Kashkarova M. V., Bilsky A. V. Estimation of the flows mixing efficiency inside T-micromixer with an external perturbation for low Reynolds numbers // *Journal of Physics: Conference Series* (link)
3. Ting-Jeng Liu, Shao-Min Hsu, Meng-JhuWu, **Pavel Ianko**, Cheng-Yao Lo. Efficient and improved qualification method for patterns with irregular edges in printed electronics // *Journal of Micromechanics and Microengineering* (link)
4. Kravtsova A. Yu., **Ianko P.E.**, Kashkarova M. V., Bilsky A. V. Investigation of the perturbation flow in a T-microchannel using the LIF technique // *Journal of Visualization* (link)
5. Kravtsova A.Yu., **Ianko P.E.**, Meashalkin Yu.E., Bilsky A.V. Influence of External Periodic Perturbation on the Flow in T-Microchannel // *AIP Conference Proceedings 2027, 040084 (2018)* (link)

Conference Papers

1. **P.E. Ianko**, A.Yu. Kravtsova. Experimental Investigation of the fluid flow structure in T-type micromixers for varied inlet flowrates ratio. // *Int. Conf. on the Methods of Aerophys. Research (Novosibirsk, Russia, November 1-7, 2020): Abstracts. Pt. I. Novosibirsk: Parallel, 2020. p. 84* (link)
2. Kravtsova A.Yu., Kashkarova M.V., **Ianko P.E.**, Bilsky A.V., Kravtsov Yu.V. Influence of the inlet flowrates ratio on the fluid mixing inside T-type micromixer for low Reynolds numbers // Proceedings, *36th Siberian Thermophysics Seminar, Russia, Novosibirsk, 5-7 October, 2020, p. 215* (link)
3. Kravtsova A.Yu., Kashkarova M.V., **Ianko P.E.**, Bilsky A.V., Kravtsov Yu.V. Special features of the fluid flow inside a T-type element for low Reynolds numbers and varied flowrate ratios // *Proceedings of the V All-Russian Scientific conference and School for Young Scientists. Novosibirsk, Russia, September 13-20, 2020, p.180* (link)
4. **P.E. Ianko**, J. Liu. Algorithm for printed microcircuitry validation in printed electronics // *Proceedings of the 58th International Scientific Student Conference, Novosibirsk, 10-13 April, 2020, Section of Information technology, p. 136* (link)
5. Kravtsova Aleksandra, **Ianko Pavel**, Kashkarova Margarita, Bilsky Artur. Investigation of the Mixing Efficiency and the Diffusion in the T micromixers at the Different Relation of the Inlet Flowrates // Proceedings, *International Conference on Engineering, Science and Industrial Applications (ICESI 2019), Japan, Tokyo, 22-24 August, 2019, p. 34* (link)
6. Kravtsova A.Yu., **Ianko P.E.**, Kashkarova M.V., Bilsky A.V. Influence of the periodical external perturbation on the fluid flow in a micron-sized channel // Proceedings, *35th Siberian Thermophysics Seminar, Russia, Novosibirsk, 27-29 August, 2019, p. 268* (link)
7. **Ianko P.E.** Experimental Investigation of the fluid flow inside a T-mixer for different ratios of the inlet Reynolds numbers // *Proceedings of the 57th International Scientific Student Conference, Novosibirsk, 14-19 April, 2019, Section of Continuous Media Physics, p. 28* (link)
8. **Ianko P.E.**, Meshalkin Yu.E. Detalization of the perturbed microflow flow structure inside a T-microchannel // Proceedings, *25th All-Russian Scientific Conference for Student Physicists, Russia, Crimea, Sevastopol, 19-26 April, 2019, pp. 502-503* (link)
9. Kravtsova A.Yu., **Ianko P.E.**, Meshalkin Yu.E., Bilsky A.V. Influence of External Periodic Perturbation on the Flow in T-Microchannel // Abstracts, part II, *19th International Conference on Methods of Aerophysical Research (ICMAR), Russia, Novosibirsk, 13-19 August, 2018, p. 165* (link)
10. **Ianko P.E.** Influence of the outer actuation on the flow inside a T-type jet microchannel // *Proceedings of the 56th International Scientific Student Conference, Novosibirsk, 22-27 April, 2018, Section of Continuous Media Physics, p. 61* (link)