

## 4<sup>TH</sup> INTERNATIONAL CONFERENCE ON INNOVATIVE AND SMART MATERIALS

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## **Robotics and technologies – Future outlook**

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Nowadays humanity use robotics technologies in numerous ways. Some of them help disable people, some of them helping in daily life. Robotics manipulators have different ways to use in industry and for helping people. Mostly researches for helping disable people and improve production in a factory. Could we use in manipulators in one more way? Yes. Disable people can control their bionic arm by the muscle or their brain. At University of Pittsburg School of Medicine Adrew Schwartz help Nathan Copeland to control robotic arm by his brain and demonstrate his technology. Now we can apply these technologies for people who working in high risk works. For example: in space exploration. Astronaut could control one more arm by his brain to improve his productivity and reduce his fatigue or holding by ISS. For future colonists it becomes useful as well. Researches in AI field also could be applied for future projects. Probes which landing on the celestial body's surface with AI on board could help in explore unknown worlds and their environment. It means that we not needed put people in risk in order to explore new worlds, but still robots cannot replace human in 100%. Now we can use both technologies added computer vision and we get unlimited sub virtual presence human being at the surface of celestial body. He still able to influence of environment by his will, can touch what he found interesting and robot help him in orientation on the surface to avoid obstacles and ravines. It can be combining with robots of Boston Dynamics. Robots which help you in a daily life and on which you have full control await us in a future.

## **Biography**

Mr Vilkov Aleksandr has his expertise in developing mechatronics, automation and robotics system and modules. That expertise helps him working at AEROELECTROMASH and at SuperOX LLC Japan. In 2016 graduated as specialist/master degree in engineering in BMSTU (Bauman Moscow State Technical University).

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