

# Ivan Kharitonov

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I am interested in automotive and robotics areas and looking for a challenging software developer position in the self-driving industry and expand my knowledge and skills in control problems.

## Education

2008 – 2014	MS + BS (electrical engineering) at <b>Bauman Moscow State Technical University</b>
2016	Data Mining in Action course (open ML course at MIPT)
2017 – 2019	Additional education at <b>Yandex School of Data Analysis</b> – Computer Science program

## Professional Experience

Feb 2019 – Jun 2019 Yandex DA school	TEACHING ASSISTANT FOR THE COURSE PRACTICAL RL Provided help and read seminars with hw checkups in HSE and YSDA
Jul 2015 – Nov 2017 <b>FSUE NAMI</b> Central Scientific Research Automotive Institute – Information and Intelligent Systems Center	RESEARCH ENGINEER AT SELF-DRIVING DEPARTMENT ( <a href="#">SHUTTLE PROJECT</a> ) <ul style="list-style-type: none"><li>Implemented perception models for object detection task – collecting/generating training data, optimizing the model design, model implementation (Caffe DL framework) and evaluation.</li></ul> SOFTWARE DEVELOPER (CONTROL SYSTEMS) AT TRANSMISSION CONTROL SYSTEMS DEPARTMENT ( <a href="#">AURUS PROJECT</a> ) <ul style="list-style-type: none"><li>System identification – created plant models for some vehicle mechanism, such that gearbox clutch hydraulic actuator.</li><li>Implemented basic software layer for automotive microcontroller (C, Simulink, Altium Designer) from scratch.</li><li>Designed and implemented a controller for hydraulic actuators with further improving quality metrics and decreasing system setting time.</li><li>Decreased calibration time by developing automated calibration procedure of control system parameters and tested control algorithms on the testbench.</li></ul>
Mar 2013 – Aug 2015 <b>BMSTU</b> Bauman Moscow State Technical University	HARDWARE AND TELEMETRY ENGINEER ON <a href="#">AN FSAE TEAM</a> . Participated in international engineering competition FSAE as a member of the university racing team. Responsibilities: hardware and software development, sponsorship and partnership management. Achievements: <ul style="list-style-type: none"><li>Released projects: MS thesis – using RTK navigation for telemetry, F1-like steering wheel with integrated LCD, wireless telemetry module, signals expansion module by reverse-engineering the race ECU CANbus protocol.</li><li>Received positive feedback from judges on the design event with good score.</li><li>Established sponsorship contracts with several companies. As a result, we were granted new equipment.</li></ul>
<b>Crypto LLC</b> Systems integrator	Feb 2012 – Jul 2013 ENGINEER AT SYSTEM INTEGRATION DEPARTMENT. <ul style="list-style-type: none"><li>Adapted the product to the customer by adding fault tolerance setup.</li><li>Integrated the monitoring tool (Zabbix) with a data management system.</li></ul>
May 2009 – Feb 2012 <b>PJSC VimpelCom</b>	TEST ENGINEER. The Vimpelcom's <a href="#">pilot project</a> - TV provider for mobile phones. <ul style="list-style-type: none"><li>Monitoring of the head and base stations (DVB-H) and 2nd level technical support.</li></ul>

## Skills

Programming	C, C++, Python, Simulink, MATLAB.
Other software	Vector software, Altium Designer, Solidworks, LabView
Languages	Russian – Native, English – B2

Other

Recent Activities	organized reading club about robotics and self-driving at the BMSTU formula student group
Other interests	road bicycle racing, motorsport