Ivan Kharitonov

Moscow ipkharitonov@gmail.com +7(916)785-71-11

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 **Bauman Moscow State Technical University**
2016	Data Mining in Action course (open ML course at MIPT)
2017 – 2019	Additional education at **Yandex School of Data Analysis** – 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
FSUE NAMI
Central Scientific Research Automotive Institute – Information and Intelligent Systems Center

Research engineer at self-driving department (Shuttle project)

- Implemented perception models for object detection task – collecting/generating training data, optimizing the model design, model implementation (Caffe DL framework) and evaluation.

Software developer (Control systems) at transmission control systems department (Aurus project)

- System identification – created plant models for some vehicle mechanism, such that gearbox clutch hydraulic actuator.
- Implemented basic software layer for automotive microcontroller (C, Simulink, Altium Designer) from scratch.
- Designed and implemented a controller for hydraulic actuators with further improving quality metrics and decreasing system setting time.
- Decreased calibration time by developing automated calibration procedure of control system parameters and tested control algorithms on the testbench.

Mar 2013 – Aug 2015
BMSTU
Bauman Moscow State Technical University

Hardware and telemetry engineer on an FSAE team. Participated in international engineering competition FSAE as a member of the university racing team. Responsibilities: hardware and software development, sponsorship and partnership management. Achievements:

- 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.
- Received positive feedback from judges on the design event with good score.
- Established sponsorship contracts with several companies. As a result, we were granted new equipment.

Feb 2012 – Jul 2013
Crypto LLC
Systems integrator

Engineer at System Integration Department.

- Adapted the product to the customer by adding fault tolerance setup.
- Integrated the monitoring tool (Zabbix) with a data management system.

May 2009 – Feb 2012
PJSC VimpelCom

Test Engineer. The Vimpelcom's pilot project - TV provider for mobile phones.

- Monitoring of the head and base stations (DVB-H) and 2nd level technical support.

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, FSAE AI judging
Other interests	road bicycle racing, motorsport