Danil Neverov

Currently in
Saint Petersburg, Russia
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⚲ LinkedIn

Professional Skills

●●●●   C++, Applied Math

●●●○   Linux, CI/CD,
Team Management

●●○○   Python, Matlab

●○○○   CAM/G-Code,
CAD Modeling,
PLC Programming

Languages

●●●●   Russian (native)

●●●○   English
(FCE: CEFR C1 level)

Education

2013. Saint Petersburg State University
Specialist degree in Applied Mathematics and Computer Science
GPA 4.8/5 Diploma with distinction

2008. Fadeeev Academic Gymnasium of SPSU

Last updated: August, 2022.

Professional Experience

Aug. 2018 – Aug. 2022
Tech Lead of Robot Driver team at **ARRIVAL**
London, UK / Saint Petersburg, Russia

Worked on the software platform for a flexible fully autonomous robotic assembly cell (promo video). I started as a developer and later became a team lead of 7 developers. Our team covered a hardware interaction layer of this platform. My responsibilities included:

- Designing and implementing custom real-time feedback controllers for specific robotic operations, which involved CV feedback, force feedback, direct torque/current control of robot motors, etc;
- Implementing polymorphic vendor-agnostic hardware communication abstractions, which involved dealing with various industrial protocols such as PowerLink, OPC UA, Ethernet I/P and various application layer protocols such as Kuka RSI, UR RTDE, ABB EGM, etc;
- Developing the architecture to wrap the above components into a single realtime Linux-based application;
- Managing tasks for the team, enforcing good software practices, maintaining the long term product vision and roadmap;
- Communicating with other teams, higher management and external partners (contractors, universities, etc), presenting for the internal and external demos (investors, universities, etc.).

Technology stack: *C++20, Linux Preempt RT, GCC, CMake, Git, Gitlab, Jenkins, Ansible, Docker, Kubernetes, Python, Matlab, Jira, Confluense*
Information: arrival.com

Aug. 2013 – Aug. 2018
C++Developer - Mathematician at **CIMCO Software**
Copenhagen, Denmark / Saint Petersburg, Russia

Developed a mathematical core for CAD/CAM software:

- Mainly worked on the new CNC toolpath generation library. Implemented several 3-axis milling strategies, including some unique cutting edge strategies that didn't exist before.
Information: mastercam.dk
- Extended a geometric library for working with 2D primitives for 2D CAD editor.
Information: cimco.com

Technology stack: *C++, Windows, Visual Studio*

Personal

- I am an active enthusiast of DIY culture. I assembled and programmed two quadcopters out of hobby parts and Arduino.
- I occasionally participate in various hackatons and competitions such as TrackML. Back in school and university I won several local and state-level math and physics competitions among students.
- I am always eager to learn more so I am an active user of various online educational resources as well as offline seminars and meetings. I also occasionally participate in such events as a speaker.
- My scientific and professional areas of interest, in which I did my personal projects and maintain educational efforts are the following:
    - Industrial automation, Robotics, ML, Artificial Intelligence
    - Computer-Aided everything including CAD, CAM and
    - Computer-Aided Biotechnology, Bioinformatics, Neurosciences
    - Quantum Computing, Theoretical Physics and Math
- As for non-professionally related activities and interests I like Snow/Surf/Skateboarding, MTB, Japanese cars and Esports.