

Evgenii Safronov

MathWorks
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Dear MathWorks,

I found this Robotics SLAM summer internship offer *best-matching* compared with others (seriously, I'm not writing this to every cover letter!). Why? I...

- Have an experience with **LIDAR**, SLAM, Particle Filter on a real competitive robot
- Highly motivated to get maximum experience from internship. My master thesis will result in a mobile robot, which 100% would use SLAM algorithms
- Made a good project with **IMU** sensors (see recommendation by M.Panov)
- Familiar with **C++** and OOP - check, for instance <https://github.com/safoex/nixcpp> homework for advanced C++ course with good practices.
- Right now developing a mobile robot software based on ROS for Eurobot competition
- Used **Matlab** on my previous internship (physical simulations at Helmholtz-Zentrum Berlin)

No need to say that MathWorks is world-famous company and it motivates to work hard during internship.

I recieved a bachelor degree in Applied Mathematics and Physics. It gave me excellent overall math background. I'd like to mention Linear Algebra and Probability Theory courses. I always took some extra programming activities to "keep fit" - from website development to robotics project in parallel with bachelor thesis. Finally, I've got bachelor with honors (GPA **4.92**/5) from MIPT - one of most prestigious Russian universities.

Now I'm enrolled in Skoltech - novel russian university which has collaboration with MIT. I have all excellent grades since I started my education here. I took two elective from Data Science track (Introduction to Data Science and Optimization Methods). I work in Intelligent Space Robotics laboratory on Eurobot Open competition. That's most popular and prestigious robotics contest in Europe. It involves full cycle of robot production - we design, make, code and test two autonomous mobile robots by ourselves. Our robots use fusion of LIDARS, encoders and local sensors for best localisation precision. ROS part of our work can be found here <https://github.com/SkoltechRobotics/ros-eurobot-2018>. I also work on decision making and task execution, and this experience will help for ROS testing.

As I wrote, my master thesis will be associated with autonomous indoor mobile robot or with autonomous car project. Both of them are represented in my lab. So, this internship won't be just summer relax for me - it gives me a great opportunity to work in the world-class company on a very relevant problem!

Hope I delivered my sincere interest in MathWorks internship.

Evgenii Safronov