

# TUSUR

Ministry of Education and Science of the Russian Federation  
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SYSTEMS AND RADIOELECTRONICS»**

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February 28, 2019

## RECOMMENDATION LETTER

**Bogdan Gorelkin**

Being Candidate of Technical Sciences and Basic and teacher Wireless and Wired Communication Systems I am the supervisor of the student Bogdan Gorelkin. We have met first one years ago, when Bogdan came to me to do research. He came with a pre-selected topic: "Research of technologies LoRa WAN and NB IoT for telemetry devices with low data rate". Working with this student is very efficient and easy for me as he is very helpful and performs perfectly the his tasks. He is able to study individually the new topics and problems needed to reach his goal. At the moment, under my leadership, Bogdan created the NarrowBand Internet of Thing communication system model in accordance with the 3gpp standard and gained access to the NI USRP-2953 device in order to carry out further research.

Before entering Master, he graduated from Bachelour where he got the qualification "Radio technician". We were acquainted with Bogdan when he was a Bachelor, when he was shows interest for the work of other employees in the research team.

He is working hard on the master's thesis "Research of technologies LoRa WAN and NB IoT for telemetry devices with low data rate". The work that he is carrying out is very important for the development for the further development of this direction. His work reveals a high level of engineering education.

I am convinced that he could be a good candidate for the mentioned above scholarships for studies in France and without any doubts will be helpful for the joint research. He will also continue to work on this topic during his studies in France. If you need any more information, you could contact me by e-mail: [udzhon@mail.ru](mailto:udzhon@mail.ru).

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*agreed by  
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