

# Ivan Bocharov

Eindhoven  
The Netherlands  
✉ [i.a.bocharov@tue.nl](mailto:i.a.bocharov@tue.nl)  
📁 [ivan-bocharov.github.io](https://ivan-bocharov.github.io)  
🌐 [ivan-bocharov](https://ivan-bocharov.github.io)

---

## Education

- 2015– **PhD student**, *Eindhoven University of Technology*.  
Current Research in personalized probabilistic acoustic scene classifiers
- 2012–2014 **M.Sc.**, *National Research University “Moscow Power Engineering Institute”*,  
Moscow.  
with honours
- 2008–2012 **B.Sc.**, *National Research University “Moscow Power Engineering Institute”*,  
Moscow.  
with honours

---

## Master thesis

- title *Linear and non-linear models in text classification tasks*  
supervisors D. Sc., Prof. Falk. V.N., Shagraev A.G., PhD

---

## Bachelor thesis

- title *Research and development of automated classification algorithm for news articles*  
supervisors D. Sc., Prof. Falk. V.N., Shagraev A.G., PhD

---

## Experience

### Professional experience

- Jan,2015– **Software Developer**, *Rambler&Co*, Moscow.  
Aug,2015 Web development
- Jul,2013– **Software Developer**, *Mail.Ru Group*, Moscow.  
Dec,2014 GIS Development
  - Support and development of geosearch engine
  - Development of tile rendering engine
- Aug,2012– **Assistant**, *ISP RAS*, Moscow.  
Jun,2013 Software verification

### Student supervision

- M.Sc. ◦ Ismail Senoz, “*Generative Probabilistic Models for Audio Textures*”  
students - Daily supervision

### Teaching experience

- Jan,2015– **Algorithms**, *NRU “MPEI”*, Teaching assistant.  
Aug,2015 Teaching string algorithms, search data structures (heaps, search trees). Creation of problem sets and grading using automated tester.  
Sep,2014– **Graph theory**, *NRU “MPEI”*, Teaching assistant.  
Jan,2015 Teaching practical aspects of graph theory. Creation of problem sets and grading using automated tester.  
Sep,2013– **Software development**, *NRU “MPEI”*, Teaching assistant.  
Aug,2014 Teaching tutorials weekly. Grading problem sets and quizzes.

### Miscellaneous

- Oct,2014– **Junior Researcher**, *NRU “MPEI”*, Moscow.  
Aug,2015 Research in machine learning, neural networks, NLP

---

### Languages

- English TOEFL IBT (2014) 113/120  
Russian Native

---

### Computer skills

- Programming Python, Julia, C++  
languages  
Typesetting  $\text{\LaTeX}$ , Microsoft Office  
systems  
DBMS PostgreSQL

---

### Publications

- [1] Ivan Bocharov, Tjalling J. Tjalkens, and Bert de Vries. Acoustic scene classification from few examples. In *2018 26th European Signal Processing Conference (EUSIPCO 2018)*, Roma, Italy, September 2018.
- [2] Thijs van de Laar, Marco Cox, Ismail Senoz, Ivan Bocharov, and Bert de Vries. Forneylab: A toolbox for biologically plausible free energy minimization in dynamic neural models. In *2018 Conference on Complex Systems*, September 2018.
- [3] Ivan Bocharov, Bert de Vries, and Tjalling Tjalkens. K-shot learning of acoustic context. In *Proceedings of Workshop Machine Learning for Audio Signal Processing at NIPS*, 2017.
- [4] Alexey Shagraev, Ivan Bocharov, and V.N. Falk. Transductive learning and logistic regression. *Programmnye produkty i sistemi (Software and Systems)*, 2 (106):114–118, April 2014.
- [5] Ivan Bocharov, V.P. Kutepov, and Pavel Shamal. Type checking system for functional programming language FPTL. *Programmnye produkty i sistemi (Software and Systems)*, 2 (106):11–17, April 2014.