



RESEARCH Data Science Engineer at the Speech Synthesis team

== PROJECT DESCRIPTION ==

The Saint-Petersburg Huawei R&D department is looking to hire a Data Science Engineer into the Speech Synthesis (aka Text-To-Speech) team, the team that is and will be in charge of the voice of the Huawei Personal Assistant. The voice of the Personal Assistant plays a highly important role in the user experience during the human-machine interaction, it significantly influences the user's perception of the personality of the assistant, can make the interaction either more or less engaging.

== SOME CHALLENGES ==

- ✓ Generate human-like natural sounding speech from text using machine learning.
- ✓ Take care of the prosody, change of intonation.
- ✓ Model emotions in speech.
- ✓ Voice conversion.

== RESPONSIBILITIES ==

- ✓ Keeping up with the current state-of-the-art research in speech synthesis and related areas
 (through reading, analyzing and summarizing articles in the field).
- Designing and implementing evaluation procedures for machine learning algorithms and analyzing the results.
- ✓ Testing existing implementations as well as implementing machine learning algorithms with their subsequent adjustment and tuning.
- ✓ Optimizing the implementations to meet the production requirements.



== REQUIREMENTS ==

- ✓ Solid mathematical background, good understanding of statistics, theory of probabilities.
- ✓ Good understanding of machine learning (classical approaches and at least some state-ofthe-art algorithms).
- ✓ Good understanding of deep learning and neural networks in particular.
- ✓ Solid programming skills (preferably python).
- ✓ Linux command line experience.
- ✓ Good communication skills, spoken English (intermediate).

== IT WILL BE AN ADVANTAGE (in order of priority) ==

- ✓ Practical experience of participating in machine learning projects.
- ✓ Experience in Tensorflow (highly preferable) or Pytorch.
- ✓ Experience in digital signal processing (experience in speech synthesis is a huge advantage, but any type of digital signal processing is a plus).
- ✓ Practical experience in Big Data processing.
- ✓ Java / C ++ industrial development experience.

== CONDITIONS ==

- ✓ Compensation we offer is above of Russian average market level. For employees with good performance we offer additionally rate allowance that makes our compensation competitive on global market. Annual bonus for high performers up to ½ from annual fixed salary. Time-based Unit Plan (TUP) is a profit-sharing and bonus plan. In 5 years TUP can become the most significant part of total cash compensation.
- ✓ An opportunity to build the product that will be used by millions of people around the world.
- ✓ An opportunity to visit professional conferences that you are interested in.
- ✓ Flexible work hours, no dress code.
- Corporate discounts for purchasing devices.
- ✓ "A" class business center located in the historical part of St. Petersburg (Zvenigorodskaya).
- ✓ Fitness hall with a panoramic city view.
- Relocation bonus for candidates moving from other cities.
- ✓ As we have several contracting methods we can find the balance with you, between engineering work, your research activity at university or academy, and your private life.



== ADVANTAGES OF WORKING IN SAINT-PETERSBURG HUAWEI RESEARCH CENTER ==

✓ Ability to make an impact in an ambitious project that will touch the lives of millions of people all over the world.

The Saint-Petersburg Huawei Research Center in general and the Voice Assistant project in particular are relatively young.

This means that if you join us now you will be at its roots, you can influence its course of action. The team is in general very flexible.

The company being headed towards innovation, the leaders and management listen to all the employees and are eager to integrate new ideas, both in terms of the solution we produce and the organization of our internal processes. You can make a real difference!

✓ Possibility to partake in research activities all while contributing to a real industrial product.

Our project is in between research and production, which means that those who are interested in more research-oriented activities are given the opportunity to dive deeper into the latest achievements of the academic research, explore and experiment with the newest technologies, all while keeping in touch with real-life applications and participating in the creation of products that are then used by a wide audience all over the world.

✓ Collaboration with leading research institutions all over the world and ability to visit relevant conferences in the field.

Still in its aspiration towards innovation, Huawei collaborates with the top academies in the world, which brings vast expertise to the service of the company projects.

It also encourages and helps financing its employees to visit the top conferences relevant to their field of work.

== BASIC FACTS ABOUT US ==

- ✓ We are 129th from top 500 Fortune world companies.
- ✓ We are the global No. 1 telecom solution provider serving 45 of the world's top 50 operators. Double digit % growth in revenues every year since 2006, now we reach almost \$60 billion.
- ✓ We invest in engineering and innovation a lot, about 80,000+ from our 170,000 global employees work in product and solution R&D across the globe, in 2015 invested nearly \$8 billion in R&D.
- ✓ Now we have over 400 researchers are working in Moscow, Saint-Petersburg and in Nizhny Novgorod. 50% of them are PhDs. They are the global centers of competence in some areas and are conducting research and development in the areas of: for transmitters and amplifiers of signals of wireless and fixed-line telephony, including increasing efficiency, and error-



correcting channel coding, beamforming, networks and IoT (Protocol level); processing and transmission of media to mobile operator and enterprise platforms and video surveillance systems; data storage, virtualization and cloud platform; improvement of touch systems of the mobile platform (bio-, acceleration, indoor navigation).

Please send your CV and/or further questions to:

Chernysheva.yuliya@huawei.com