

George Fedoseev

Machine Learning Engineer

Solving natural language understanding using deep learning. Research experience with DL in the ASR. 8+ years of coding. Love unit tests and code reviews. Developing mobile apps in free time.

Languages: Python, C#, Java, Swift, TypeScript

Technologies: PyTorch, TensorFlow, .NET, Docker, Linux CLI, SQL/NoSQL, Git

george.fedoseev@me.com

[LinkedIn/GeorgeFedoseev](#)

[GitHub/GeorgeFedoseev](#)

georgefedoseev.com

Machine Learning R&D Engineer

at [Huawei, Saint-Petersburg](#)

09/2019 – currently

- Developing models for intent classification, slot filling and named entity recognition.
- Worked on active learning data collection system.
- Developed generative language models for data augmentation.

01/2019 – 09/2019

- Worked on real-time hair coloring app [HairBrush](#)
- Developed Unity assets: [DropboxSync](#), [Embedded Gallery](#) and [Unsplash Explorer](#)

Senior Software Engineer

at [EventAgrade Software and Technologies, Dubai](#)

02/2017 – 01/2019 (01/2018 – 10/2018 remotely)

Worked on 30+ interactive experience projects in the event industry with short delivery times. Used a wide variety of interactive hardware and software.

- Developed a [system](#) for aggregating location data from multiple passive RFID tag readers (Impinj xArray) in a large room. Features a 3D GUI for modeling room setup and tweaking the reader configurations remotely.
- Worked on [AR outside-in](#) (with IR markers tracking) and inside-out (ARKit) iPad [applications](#) for real estate stands.
- Developed gameplay and networking logic for multi-player VR ["Save Dubai from UFOs" game](#) in UE4 for HTC Vive.
- Developed interactive Splash Portrait kiosk for Dubai CityScape exhibition mixing Kinect, OpenCV and decorative effects to let users [create their artistic portraits in a few minutes](#).

Software Engineer

at [SpheraVR / MIRVR, Saint-Petersburg](#)

07/2016 – 01/2017

- Built control and analytics system for organizing [on-spot VR gaming experiences in malls and cinemas](#) using c# .NET, ASP.NET and AngularJS. Worked with Windows API to automate game launching and identify and track game processes.
- Developed [GearVR educational application](#) (Unity3D) for watching video courses in a [relaxing](#) virtual environment. Built video course player with VR controls and optimized 3d scenes for mobile VR.

University and Publications

- Bachelor's degree in Applied Math and Computer Science, Saint-Petersburg State University (09/2013 – 06/2018, 2017 – gap year for work) **GPA:** 3.7/4 (3.83 if using passed=excellent)
- Developed a speech recognition system (based on DeepSpeech architecture) for [searching in a big collection of video files](#). Challenge was to programmatically acquire a big enough dataset (> 650hrs of transcribed speech) for the Russian language, which was solved by extracting (audio, transcription) samples from YouTube subtitles ([paper](#)). Then DNN was trained on the collected dataset and was able to achieve 18% WER on the voxforge-ru test set ([paper 1](#), [paper 2](#)).
- Setup and configured (see [poster](#)) Continuous Integration system using GitLab and Docker for [MPD Root project](#) (Joint Institute for Nuclear Research) and optimized build times ([paper 1](#) [paper 2](#)).

Contributions and Personal Projects

- Wrote Dockerfile and a few other things for Mozilla's [DeepSpeech project](#).
- Released [6 iOS apps on the AppStore](#):
 - [EZ Game](#) - casual tap game about space-scale building constructions for iOS and Android.
 - [3-Things-to-Do](#) minimalistic to-do list iOS app with only 3 items per day to focus on what matters the most today. Was [reviewed on AppAdvice](#).
 - [University 3D campus map](#) app with timetable and navigation which was made for a hackathon and took the 1st place.