

George Fedoseev

Software Engineer

Full-stack software engineer with 5+ years of experience in mobile, game and web development. Able to architect and lead project to release. Finding simple and clean solutions to problems. Passionate about AI technologies.

Languages: C#, Python, Swift, Objective-C, JavaScript

Technologies: VR, AR, real-time motion tracking, machine learning, Unity3D, .NET, Linux CLI, databases, Git, Docker

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Work Experience

Senior Software Engineer

at [EventAgrate 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 modelling 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. The project took 2 weeks. The game [was presented](#) on MESE 2017 and IOTX 2017 in Dubai as a brand attraction.
- Worked on a system of multiple depth cameras blob tracking. The application combined point clouds to track multiple people feet intersections with the floor plane.
- Developed interactive Splash Portrait stand for Dubai CityScape exhibition mixing Kinect, OpenCV and decorative effects to let users [create their artistic portraits in a few minutes](#).
- Developed gameplay and networking logic for [Toyota's Drums Experience](#) at Dubai Motor Show 2017, where users were competing with each other in GuitarHero-like game by playing the drums.
- Created a network aggregation system for Kinect skeleton data to combine more than one real-time skeletons in application using several remote sensors. The system was used in [Tiffany's app](#) in Dubai Mall for jewelry reveal event.

Software Engineer

at [SpheraVR / MIRVR, Russia](#)

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.
- In a team with 3D designer built Iron Man VR Escape Room Experience for HTC Vive, where a virtual environment room was matching and enhancing a real built room.

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)
- 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](#):
 - [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](#).
 - [Forex account tracking app](#) with a skeuomorphic paper design.
 - [University 3D campus map](#) app with timetable and navigation which was made for a [hackathon](#) and took the [first place](#).