

Senya Pugach

is a software developer with experience in 3D web programming and a passion for research, science, and game development

Moscow, Russia

[mail](#) [telegram](#) [github](#) [instagram](#) [artlebedev](#)

Employments

[Art. Lebedev Studio](#) *Moscow, Russia*

R&D software engineer *november 2017 – present*

[LoyaltyPlant](#) *Saint Petersburg, Russia*

software engineer intern *june – august 2016*

Professional skills

TypeScript, WebGL, node.js, Unity & C#, AR, game development

Education

Omsk State University

Faculty of Chemistry, **Chemical Technology** *september 2017*

Faculty of Computer Sciences, **Informatics and computer engineering** *october – november 2017*

Awards

[FWA](#), [CSS Design Awards](#), [Runet Rating](#)

Featured projects

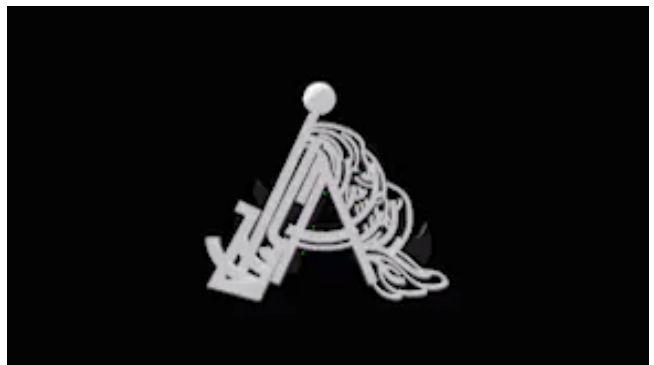


Krono: 3D engine & editor

I designed and developed a batteries-included 3D engine that is used to make mesmerising audio-visual web experiences. It has brought down our development time for 3D websites from one year to two months.

Krono comes with built-in support for editing visual effects and audio, doing post-processing, and working with modern model / texture formats and their compressors / decoders / optimisers. The developer experience is very streamlined, with only 10 lines being required to display a model for the browser. Crucially, it can also be used by non-technical designers through a web-based editor that allows for adjusting the visual appearance of the render without touching the code.

2019–2020



Aquarium

I developed an immersive site for Aquarium, legendary founders of the Russian Rock stage. As viewers scroll through the site, they are transported through a human created and randomly generated experience that showcase's Aquarium's rich history and musical collection.

While developing this narrative, I had to learn 3D rendering at the most basic level. I wrote shaders, built an extensible 3D rendering architecture (which would become Krono), created tools for designers working on the same project, and constantly solved interesting, complex problems.

2019–2020

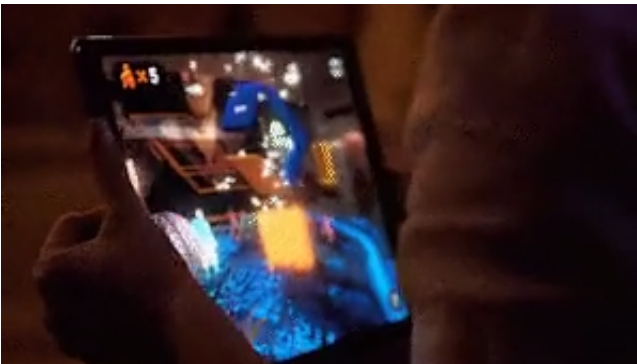


[\\$500 brain-computer interface: letters typing only with thoughts](#)

In high school, I became interested in how the human brain works and in two weeks I built a brain-computer interface that allowed me to type letters using my brain signals only.

I used OpenBCI as EEG and P300 speller from OpenViBE. I patched OpenViBE drivers to make it compatible with OpenBCI, train P300 speller on my brain, translate speller to Russian, printed a plastic helmet in another city, made the power supply from old Nokia, fused up everything, and after that I typed my first words using brain only. Also, experimenting, I was one of the first in the world who combined VR and BCI into one product.

two weeks in january 2017



[Sotbi AR iOS app](#)

An iOS augmented reality app demonstrates the oddity of corporate workdays.

Sotbi's are guys who, forcing debtors to pay back multibillion-rubles debts. So, in this AR game your goal is find the five hiding debtors.

[download](#)

2018



[Immersion into Rukami](#)

A registration page for the children's festival "Rukami". An unusual and vivid immersion into the world of the festival.

Thanks to the use of Krono, project creation time was reduced from one year to three months, because of this the profitability of this project for the company was much higher than usual.

Made with Krono.

september – november 2020



[Moscow Metro Map 4.0](#)

For the Moscow metro map I created various tools to facilitate the designer's work on the map, and also developed scripts to automate the creation of the map in different formats and its translation into different languages. My work greatly reduced the time it took to create the map and saved the company money.

winter – spring 2019

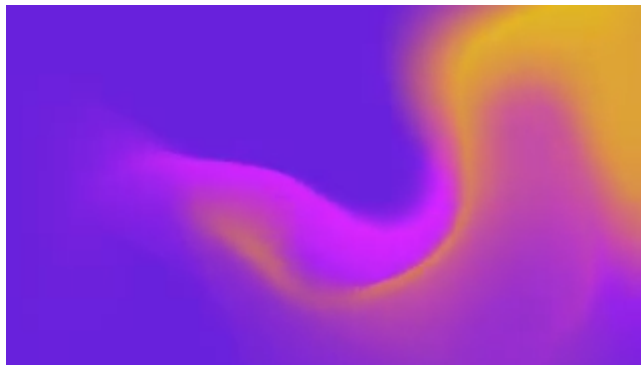


[Mother](#)

A heartbreaking game that tells the story of a draftee who comes back home to his mother. I made this in 48 hours for Ludum Dare #39. This game saved me from the army.

[sources](#)

29–30 july 2017



[Moscow International Medical Cluster website](#)

MIMC is an unprecedented international medical project in Russia. I was the lead developer of it's site: I guided and organized the other developers, developed the main visual element of the project's identity — a mesmerizingly lively spot, made an editor for quick spot customization, and made a terrific 3D.

2019–2020

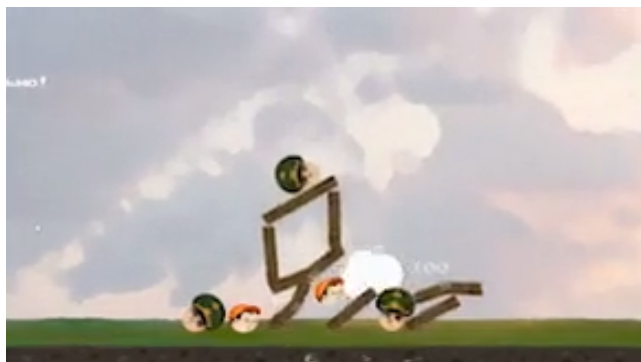


[“My Way” Windows Phone app](#)

A Windows Phone application that allows residents of Omsk to find out when a bus will arrive at their stop. It is especially useful in winter to avoid freezing to death at the bus stop. **10 000 downloads**. Also, there is AR in this app, in 2014.

[download sources](#)

2014



[Angry Birds for Priziva.net](#)

Commercial game for Priziva.net, Angry Birds clone. I programmed a game with destructible environment, level editor, mobile support, different shell types, incredible sounds and a rating server. Also I coordinated work between designers.

[sources](#)

february – march 2019