

CREATIVE FRONT-END DEVELOPER

LENA ZHAVORONSKAYA
artist web site ↗



KEY SKILLS

three.js // tsl // glsl // webgl //
webgpu // java script // git //
type script // react // bash //
zustand // motion // gsap //
next.js // blender // figma //

/* Creative developer working with Three.js, real-time graphics, and custom shader systems, creating interactive visual systems for the modern web, where code becomes visual art /*

WORK EXPERIENCE

complete project portfolio ↗

2025-2026

CHIPSA DESIGN STUDIO

chipsa.design ↗

Creative Developer / WebGL Developer

- // Delivered high-performance interactive experiences featuring advanced 3D scenes built with Three.js, real-time shader systems, scroll-driven visuals, and mouse-reactive hero sections that enhanced user engagement
- // Engineered optimized image and video sequence systems with frame preloading, smart buffering, and rendering strategies to ensure smooth playback and performance efficiency
- // Designed and implemented scalable 3D architecture, including model management systems, animation pipelines, motion logic, and reusable rendering components
- // Optimized real-time performance through GPU-focused techniques, texture compression, custom scripting tools, and Web Workers while maintaining high visual fidelity
- // Built motion-driven UI systems and complex animation flows, improving timing, smoothness, and overall product experience
- // Developed CMS-driven dynamic pages, localization logic, and search functionality to enable flexible content management and scalable product growth
- // Integrated interactive maps using Mapbox and implemented responsive layouts across the entire platform

KEY PROJECTS

[Chipsa Studio Web Site ↗](#)

AWARDS: Awwwards / SOTD, Awwwards / DEV, CSSDA / WOTD

[ChillBase ↗](#)

AWARDS: CSSDA / WOTD

[ProMeat ↗](#)

AWARDS: Awwwards / HM, CSSDA / WOTD

[Visa Center ↗](#)

AWARDS: Awwwards / HM, CSSDA / WOTD

ADDITIONAL PROJECTS

[VKI ↗](#)

[Vileda ↗](#)

2024-2025

MARTA VISUALS

marta.pictures ↗

Creative Developer / WebGL Developer

- // Led full frontend and 3D (Three.js) development as the sole developer, owning architecture, rendering logic, and interaction design
- // Managed and optimized a high-density 3D scene with large-scale models and panoramic assets
- // Architected and managed a complex 3D environment with ~50 panoramic scenes, ensuring scalability and performance stability
- // Developed shaders, including occlusion highlighting, optimized reflections, and glow effects
- // Engineered a multi-mode camera animation system with orbital and fly-in transitions aligned to panorama orientation
- // Optimized the rendering pipeline for stable cross-device performance and smooth interaction

KEY PROJECTS

[KAMI — 3D Architectural Web Application ↗](#)

2022-present

FREELANCE

zhavoronskaya.github.io ↗

/ Creating interactive web experiences focused on real-time 3D, shader systems, and audio-visual interaction using Three.js, WebGPU, GLSL/TSL, and Blender */*

End-to-End Production

Creative Developer / WebGL Developer / Designer / Ideation

- // Delivered end-to-end interactive 3D web applications, combining creative direction, UI/UX design, and real-time graphics development
- // Managed and optimized a high-density 3D scene with large-scale models and panoramic assets
- // Built advanced WebGPU and Three.js scenes with custom shader systems, GPU particle simulations, procedural displacement, and audio-reactive visuals
- // Developed advanced shader systems, including occlusion highlighting, optimized reflections, and adaptive glow effects
- // Architected and optimized high-complexity 3D environments, balancing visual richness with stable cross-device performance
- // Developed uniform-driven animation logic, state-based interaction systems, and scroll-controlled camera workflows
- // Designed and modeled 3D assets in Blender, including optimization, texture baking, and performance-aware asset pipelines
- // Integrated physics simulations, post-processing effects, and custom rendering pipelines for immersive digital experiences
- // Implemented responsive frontend architecture with refined motion systems, CSS animations, and performance tuning

KEY PROJECTS

/ Detailed case studies available via links: */*

[Liza Lubi Music ↗](#)

[Audio Particles Bubble ↗](#)

[SO Coffee Roasters ↗](#)

[Parque das Virtudes ↗](#)

[Shots Gallery ↗](#)

2016-2022

MATH & SCIENCE ENGINEER

State Nuclear Engineering Organization

Worked on software for radionuclide scaling factors, emission calculations, and radiation control methodologies using C++. Managed technical specifications and contract development.

STUDY PATH

2011-2017

MASTERS OF EXPERIMENTAL AND THEORETICAL PHYSICS

National Research Nuclear University

2022-now

CREATIVE DEVELOPER & DESIGNER

Independent Study & Practice

courses / tutorials

[THE BOOK OF SHADERS ↗](#)

**GLSL fundamentals, procedural patterns, noise, SDF*

[SIMONDEV SHADERS ↗](#)

**various techniques in shaders*

[THE ART OF CODE ↗](#)

**math for generative systems*

[THREE.JS JOURNEYS ↗](#)

**key techniques in creative development / THREE.JS & OTHERS*

REACH OUT

works / code

PROJECTS

[zhavoronskaya.github.io/projects ↗](#)

PORTFOLIO

[zhavoronskaya.github.io ↗](#)

GITHUB

[github.com/zhavoronskaya ↗](#)

social

TELEGRAM

[t.me/zhavoronoki ↗](#)

X

[x.com/zhavOrnskaya ↗](#)

contact

EMAIL

[zhavoronskaya.public@gmail.com ↗](#)