ILYA LAVROV

Senior Technical Artist / Pipeline Developer

Hua Hin, Thailand · Remote | lavrenicus@gmail.com
Portfolio: lavrenicus.github.io | GitHub: github.com/lavrenicus

PROFILE

Technical Artist and Pipeline Developer with 18 years of experience across game development, animation production and render-farm systems. Develop artist tools, DCC integrations, asset validation, shaders and animation systems.

At 100 Kilowatt, personally automated initial render-scene assembly, eliminating **4-5 hours of manual preparation per shot** in a production environment serving approximately **100 users**. At Immerse Render, designed and implemented cloud-render cost calculation, selected technical solutions and assigned work to **two developers**.

TECHNICAL SKILLS

Programming: Python, C#, TypeScript, JavaScript, GLSL/HLSL; Java for render-farm services.
Engines & graphics: Unity, PlayCanvas, Babylon.js, Three.js; shaders, post-processing, animation blending, asset integration and optimization.
Profiling: Unity Profiler, Frame Debugger, RenderDoc.
DCC & production: Maya, 3ds Max, Houdini, Toon Boom, Fusion, Substance Painter, ZBrush, 3D-Coat; ftrack, AYON, Deadline.
Development: Git, SVN, GitLab CI/CD, Windows deployment, OpenStack integration, unit testing, doctest and manual verification.
Additional: Photogrammetry, rigging, skinning, motion-capture workflows.

PROFESSIONAL EXPERIENCE

Freelance Technical Artist

April 2026 - present

- Deliver character-rigging work for RocketBrush; provide consultations on geometry optimization and AI production pipelines.

Immerse Render | Lead Pipeline Developer

August 2024 - April 2026

- Developed cloud render-farm workflows and services using Java, Python and React around Deadline and OpenStack.
- Designed the architecture and implemented a render-cost calculation system based on cloud-machine configuration and rendering time. Technical support staff used the system manually; planned CRM and billing integration was not completed.
- Selected technical solutions and assigned tasks to two direct reports within a four-person development team, reporting to the team lead.
- Implemented automatic deployment through GitLab CI/CD for Windows environments. Used automated unit tests, doctest and manual verification before release.

IT-Territory | Technical Artist | Rush Royale

September 2023 - April 2024

- Established an art-asset acceptance and preparation pipeline.
- Developed a custom tool and optimized art assets for atlas packing, improving memory utilization and reducing build size to meet store requirements.
- Developed shaders and provided technical support for graphics, visual effects and animation.

Sidus Heroes / Sidus Gates IT Services | Lead Technical Artist

March 2022 - September 2023

- Developed shaders, visual effects and animation systems for PlayCanvas, Babylon.js and Unity.
- Wrote a custom animation-blending system in PlayCanvas to support deeply nested blend trees and address limitations and bugs in the built-in system. Combined locomotion, weapon handling and look-direction animation.
- Implemented heat haze in PlayCanvas using a custom post-processing pass and normals.
- Supervised two animators: wrote technical briefs, reviewed their work, coordinated approval with the art lead and integrated completed animations into the engine.

PROFESSIONAL EXPERIENCE / CONTINUED

IT Territory | Technical Artist | Zombie Blast Squad

April 2020 - March 2022

- Improved the integration process for art assets. Diagnosed graphical bugs and worked with programmers and artists to resolve them.

100 Kilowatt / VGTRK | Software Developer, Animation Pipeline

February 2018 - March 2020

- Worked in a two-developer team on an ftrack-based pipeline used by approximately 100 staff, with user numbers varying over time, and a render farm of 25 machines.
- Personally implemented automatic initial render-scene assembly from completed animation, including cache placement and lighting setup. Eliminated 4-5 hours of manual preparation per shot of approximately 120-200 frames, allowing specialists to start with scene adjustments.
- Introduced a dedicated lighting asset to support automatic scene assembly.
- Implemented automatic farm submission and draft rerendering when a shot's animation asset was updated. Artists could submit the automatically generated version for approval.
- Connected this workflow to the wider studio pipeline, including automatic draft replacement in Adobe Premiere implemented by my colleague.
- Developed a socket-based bridge between an external Python process and Toon Boom's limited JavaScript API, enabling pipeline integration and asset validation.
- Researched Fusion's poorly documented Lua API and integrated it with an external Python process.
- Extended the existing asset-validation framework and developed a complete project-specific validation suite for a new production.

Productions: Bobr-Dobr, Volshebnaya Kukhnya, Domiki, Nik Izobretatel, Moy drug s Tau Kita (pilot released), Kosmos (production frozen).

Freelance Technical Artist

May 2008 - February 2018

- Created game characters through low-poly and high-poly modeling, sculpting, retopology, texturing, rigging and skinning. Performed motion-capture cleanup and retargeting.
- Developed Unity tools and surface shaders using C#.

My History exhibitions | Technical Animation and Procedural Content | approx. 2014-2016

- Created character animation, crowd simulations and in-house plugins for historical reconstructions.
- Researched and combined existing solutions into a Kinect-based motion-capture pipeline for the Rurikovichi exhibition. The project was covered in Ogonyok / Kommersant.
- Created procedural ruins of Stalingrad in Houdini for My History: 20th Century, Part 1.

Borodino 1812-2012 | Photogrammetry | 2012

- Performed photogrammetry of monuments on the Borodino battlefield. Project video ↗

ADDITIONAL GAME CREDIT

Owlcat Games | Pathfinder: Wrath of the Righteous | Technical Artist
Worked directly with Owlcat Games around 2019. Credited as Technical Artist on the game released in 2021; credit listed on MobyGames. Work details are covered by NDA.

PERSONAL PROJECT

GridlockTactics / PixiAndDestroy | Independently developed vertical slice
Developed the complete vertical slice of a browser-based tactical game using Three.js.
Playable demo: lavrenicus.github.io/demos/pixiandestroy/index.html

EDUCATION & LANGUAGES

Natalia Nesterova Moscow Academy of Education | Faculty of Design
Higher education, graduated 2010.
Russian: Native | **English:** Reading and writing technical documentation.