

Mohammad Hossein Jamshidi

Technical Animator · Animation Programmer · Tool Developer · Physics Programmer

@ jamshidi3d@gmail.com

portfolio → jamshidi3d.github.io

git github.com/Jamshidi3d

SUMMARY

Technical animator and animation programmer who builds physics-driven animation systems, rigs and tools that hold real-time budgets in shipped online games. Technical artist since 2012, with AI solutions built into the workflow and a math and physics background (PhD candidate in cosmology) behind every system.

EXPERIENCE

Senior Technical Animator — Qorpo

Feb 2024 – present

Tamitos · 2026 early access Aneemate · 2025 Citizen Conflict · 2024

- Built from scratch, within the existing character event and layering system: the UE 5.3 character animation system and procedural animation for biped and quadruped characters, mixed with physics-driven algorithms.
- Scale:** Aneemate's system drives 120+ characters and 5 distinct behaviors; Citizen Conflict has 4 character types, Tamitos 4 characters; online animation under 30 ms.

Tool Developer — Freelance

Sep 2021 – Nov 2023

- PhysX-based posing and animation add-ons for custom Blender rigs (see Physirig).

Technical Artist — DeedemaGames

Apr 2018 – Apr 2019

Hardambil · 2018 Unity

- Online multiplayer strategy game for Android with 20+ characters; mesh and hair animation exporter, clay and hair shaders, texture baking, sprite-sheet rendering.

Modeler & Technical Animator — BeardedBird

Apr 2012 – Aug 2014

Parvaneh · 2014 Lehestan · 2013 Unity

- Parvaneh: all characters, props and environment, plus squash-stretchy bone tools and simple physics assets. Lehestan: modeler.

SELECTED PROJECTS

Every simulation runs at around 60 fps, or has an emulation that does.

Physirig — physics-based rigging system

2022 – ongoing

Designed and developed solo. PhysX-based collisions, constraints and physics-based posing for any custom Blender rig (Python, C++); eases multi-character scenes.

Browser version: Khosrobot lab; Maya planned.

Khosrobot — geometry-based rigging

2018

Calculus- and geometry-driven mechanical rig (AR); try it live in the Khosrobot lab.

Game-ready stylized character rig

2019

Blendshape-free rig that exports to any engine with full humanoid features.

Compute-shader effects — VR cable termination

Nov 2020 – Apr 2021

GPU flame deformer (shrinking, heat distribution, burning), a wire-bandage tool with collision detection, and rigged VR hands (C#).

FeelPhysics — physics programming

Oct 2018 – present

Real-time solver for mechanical systems, solid-body rotation, force fields and math/geometry libraries (100+ fps, one core).

Toy2d (Hajmineh) — cardboard-craft tools

Jun 2019 – Jun 2020

Mesh analysis, unwrapping, interactive part creation and automatic how-to animation; handles 2k-polygon meshes (Python).

SKILLS

ANIMATION & RIGGING

Physics-based animation

Physics-based rigging

Anim systems

Anim Blueprints

Procedural animation

Motion matching

Character rigging

Control Rig

ENGINES & DCC

Unreal 5 Unity Blender

Maya 3ds Max

PROGRAMMING

Python C++ · Unreal C#

MaxScript HLSL/GLSL

Compute shaders

PHYSICS & MATH

PhysX · Bullet · Rapier

Rigid-body dynamics

Linear algebra

Numerical methods

ALSO

3D modeling

PRESS

Blender.org user story (2026)

on Geometry Nodes in cosmology; also 80.lv and BlenderNation.

EDUCATION

PhD Physics (Cosmology)

Shahid Beheshti · 2021–now

MSc Physics

Sharif Univ. · 2016–2018

BSc Physics, minor Math

Sharif Univ. · 2011–2016

AWARDS

Game of the Year

Parvaneh 2014

Best 3D Graphics

Parvaneh 2014

3D Graphics Achievement

Hardambil 2018

Tehran Video Games Festival