

PHYSICS-BASED ACTION ANIMATION FOR EVERYONE

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## WHAT IS CASCADEUR?

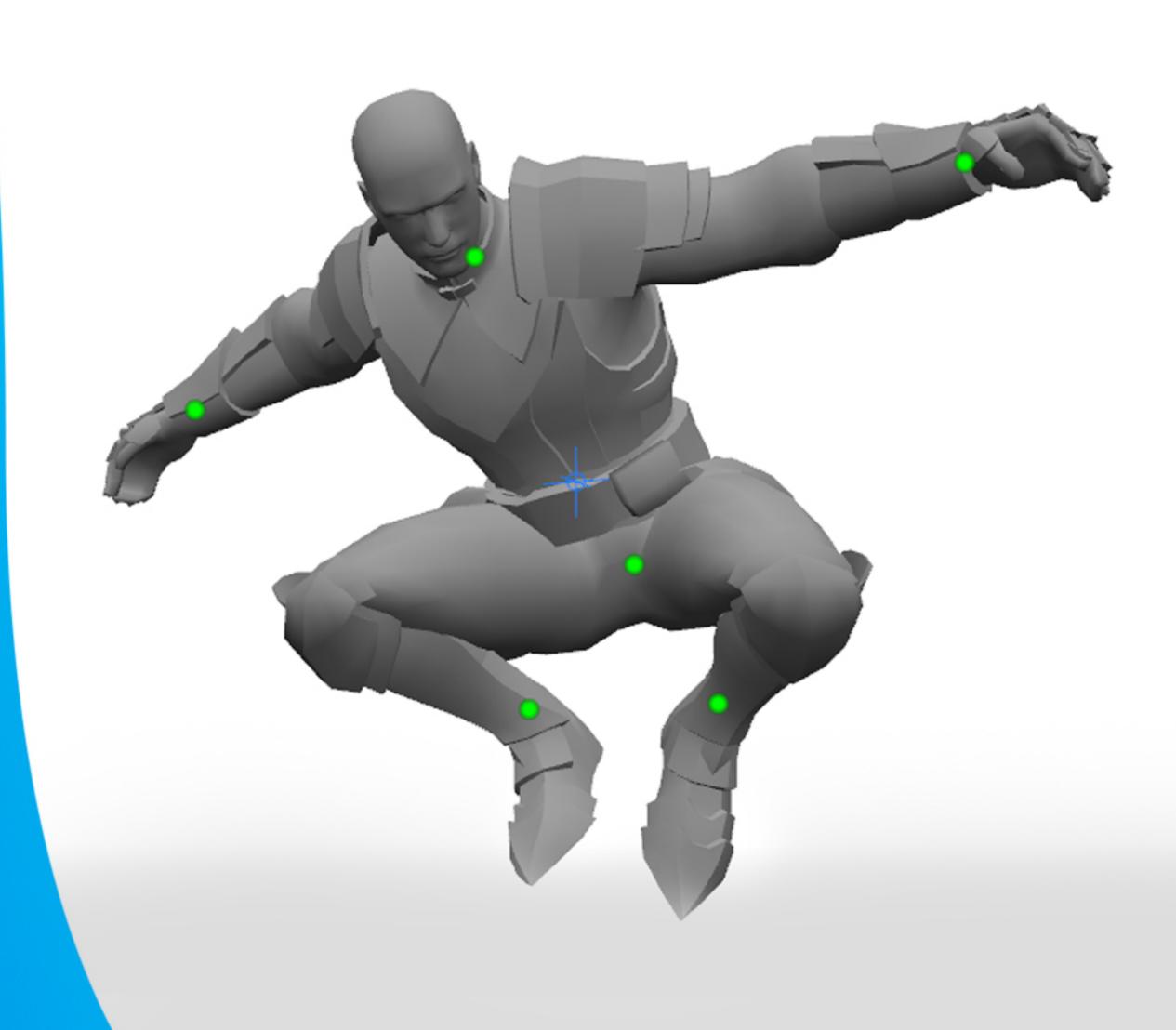
Cascadeur is a powerful physics-based animation tool for creating physically accurate animations for games and movies. In Cascadeur, game and movie developers can create realistic animations of characters of almost any type (humans, animals or any other creatures) without using motion capture technology.

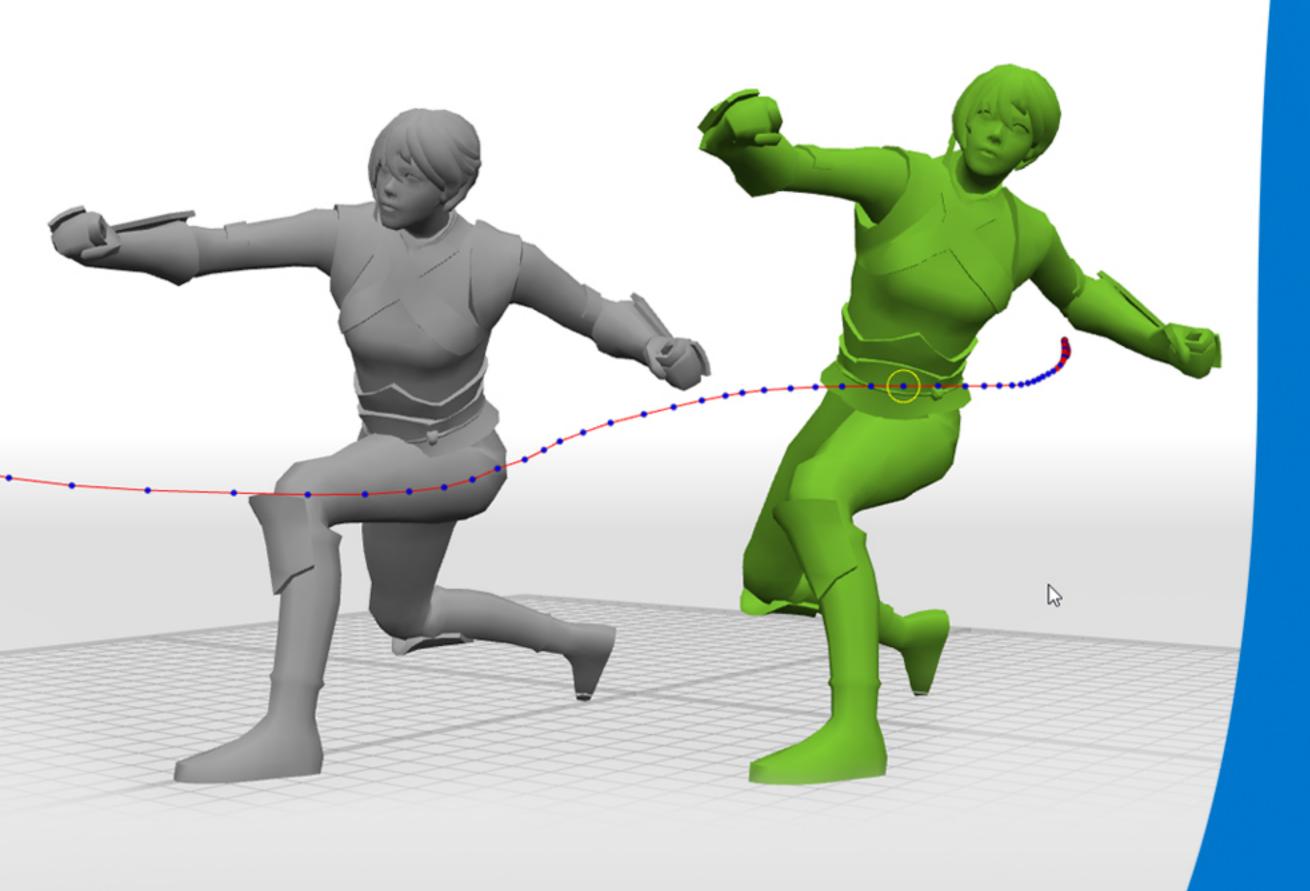
There is a lot of potential behind this idea, especially in action sequences in which stuntmen reach their physical limits. For example, the character shall jump higher than it is possible for a human being. Cascadeur can close this realism gap, so that even non-real animations become realistic and believable.

One main difference of our approach to other physics-based or neural network based tools, is that we want animators to retain full control over the end result of their work.

Cascadeur's main goal is to provide animators with convenient and user-friendly tools that will allow them to ...

- create realistic and believable action animation from scratch and then to fix the physical characteristics of the animation with the help of our physics-tools.
- to load mocap data, modify it to the desired result and then fix the correctness of the physical characteristics in Cascadeur.





# HOW DOES CASCADEUR WORK?

Just like humans or any other vertebrate body in real life, every character rig in Cascadeur is based on a physical skeleton. In the so-called rigging process, the animator has to add additional information to the skeleton, such as the weight of each body part.

Having this information, Cascadeur then calculates the realistic movement behaviour of the body and displays a physically correct version.

Thanks to AutoPhysics the animator can create a physically accurate trajectory for the centre of mass and correct the motion. Cascadeur's algorithms try to preserve the poses set in the draft.

### **VERSION HISTORY**

February 2019 - Closed beta version release (20.000 registered users)

**July 2020 - Open beta version** (45.000 registered users)

Main features: New core architecture, improved rig creation, Quick Rigging tool, GUI conversion to QML, AutoPosing tool

**April 2021 - Early Access Version 2021.1.EA** (70.000 registered users) Main features: AutoPhysics tool, improved AutoPosing with custom rigs, interval edit mode, rotation trajectories, scene linking, animation cycles, introduction of a pricing model.

July 2021 - Early Access Version 2021.2.EA (85.000 registered users)
Main features: Graph Editor, Tween Machine, improved interval edit mode,
improved AutoPhysics

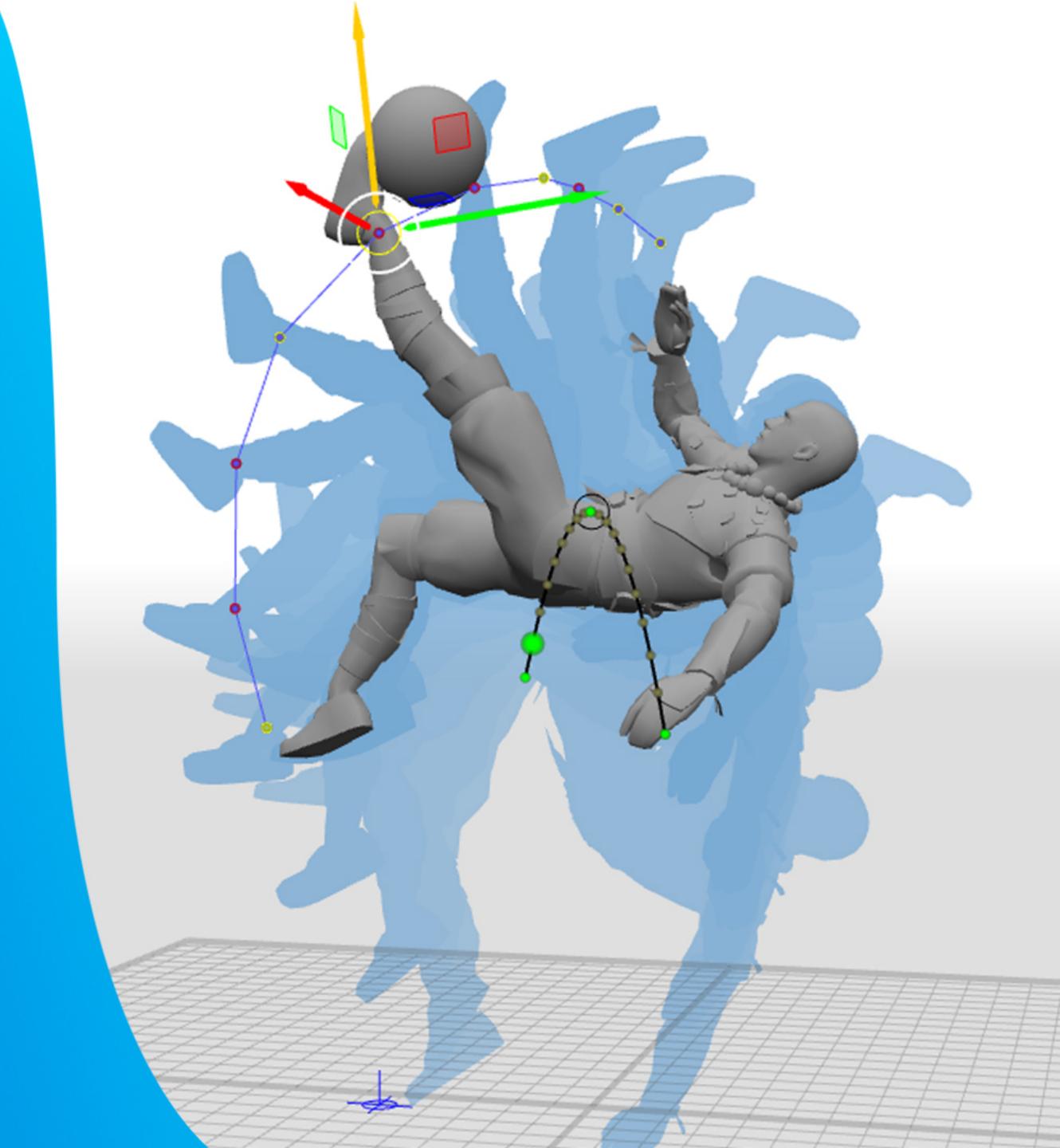
**November 2021 - Early Access Version 2021.3.EA** (95.000 registered users) Main features: Animation Cycles, Secondary motion, improved Rigging tool, improved AutoPosing

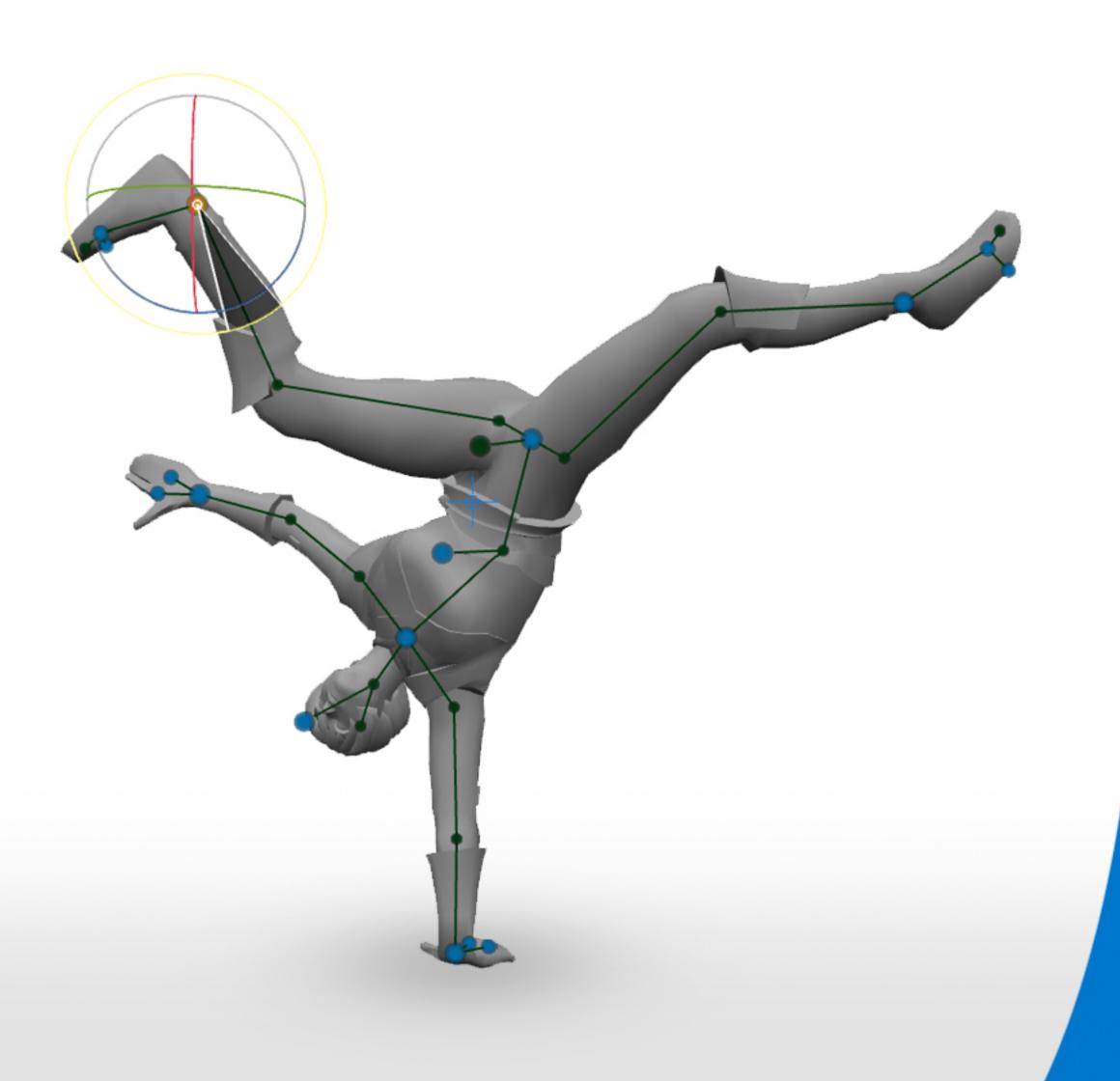
**April 2022 - Early Access Version 2022.1EA** (100.000 registered users)

Main features: Node Editor, Python scripting and fully Customizable Viewport Control

**September 2022 - Early Access Version 2022.2EA** (110.000 registered users) Main features: Major improvements to AutoPosing and AutoPhysics AI tools, new interpolation method "Global rotation", support for weapons in Quick Rigging

**December 2022 - Release Version** 





## AUTOPOSING AND AUTOPHYSICS

With its Al-powered AutoPosing and AutoPhysics tools, Cascadeur offers a unique approach to physically accurate character animation that no other software on the market can match!

With a learning curve of only a few hours, even beginners with no animation experience can achieve remarkable results which previously only professionals could.

Simply put, the animator makes a certain pose using only a few body points. Using a neural-network based AI, Cascadeur's AutoPosing tool calculates a physically accurate pose for the entire body.

After the user has set the desired poses for the keyframes, they can leave the further calculation of the movement interpolation to Cascadeur's AutoPhysics tool. The AI tool suggests a realistic animation, which can then be applied and further refined. It results in a realistic animation, where all physical forces and body physics have been accurately taken into account.

Our YouTube video «Your first animation in 5 minutes» demonstrates the simplicity and intuitiveness of this process

Watch

# THE TEAM BEHIND CASCADEUR

Cascadeur was developed by the renowned European game publisher Nekki, which is well known for its popular mobile action games, such as the Shadow Fight and Vector series, having more than a 500 Million players fanbase worldwide.

The development of Cascadeur started more than 10 years ago, when we were a small indie development studio. Vector and Shadow Fight required several hundred credible, realistic animations of martial arts moves (Shadow Fight) and Parkour jumps (Vector) on a budget.

Our founder Eugene Dyabin had the idea of developing our own set of tools for the physically correct animation of characters to avoid using expensive motion capture. These tools were applied for the first time in "Vector" and "Shadow Fight". Both games became very successful in their genre - and were praised for their realistic, lifelike animations.

Within the next 10 years, these animation tools developed into the powerful animation software Cascadeur. And since Cascadeur has been such a great help to our own animation team, we decided to package it, make it user-friendly and easy to navigate and share it with our fellow animators.





# FAVOURITE ANIMATION TOOL OF INDIE STUDIOS

Even before the official release of the full version in December 2022, Cascadeur is already being used productively by many international game development studios. Indie developers in particular appreciate Cascadeur for its ease of learning and its powerful AI tools, which enable even small teams to create impressive professional animations.

Here is a small selection of such Indie projects currently in development:

**«THE LAST PREMIERE»**BY CRYSTAL MESH

Read

**«BLISS»**BY QUICKSILVER SASH GAMES

Read

**«3D PIXEL ART GAME»** *BY T3SSEL8R* 

Read

«SILKROAD PROJECT»
BY GUEDIN

Read

«PROJECT DESTINY»
BY MIST REALMS

Read

## COMMUNITY AND SUPPORT

In January 2019, we first introduced Cascadeur to the public with our trailer, and the feedback exceeded our expectations: We had more than 18.000 registrations in the CBT between 01-2019 and 07-2020. As a result, there's already a proactive community that shows a genuine interest in experimenting with Cascadeur. It forces our software to evolve and helps us to create the best character animation tool on the market.

Here is an overview of all channels and websites that our users can visit to learn Cascadeur, to communicate with each other and to give us feedback.





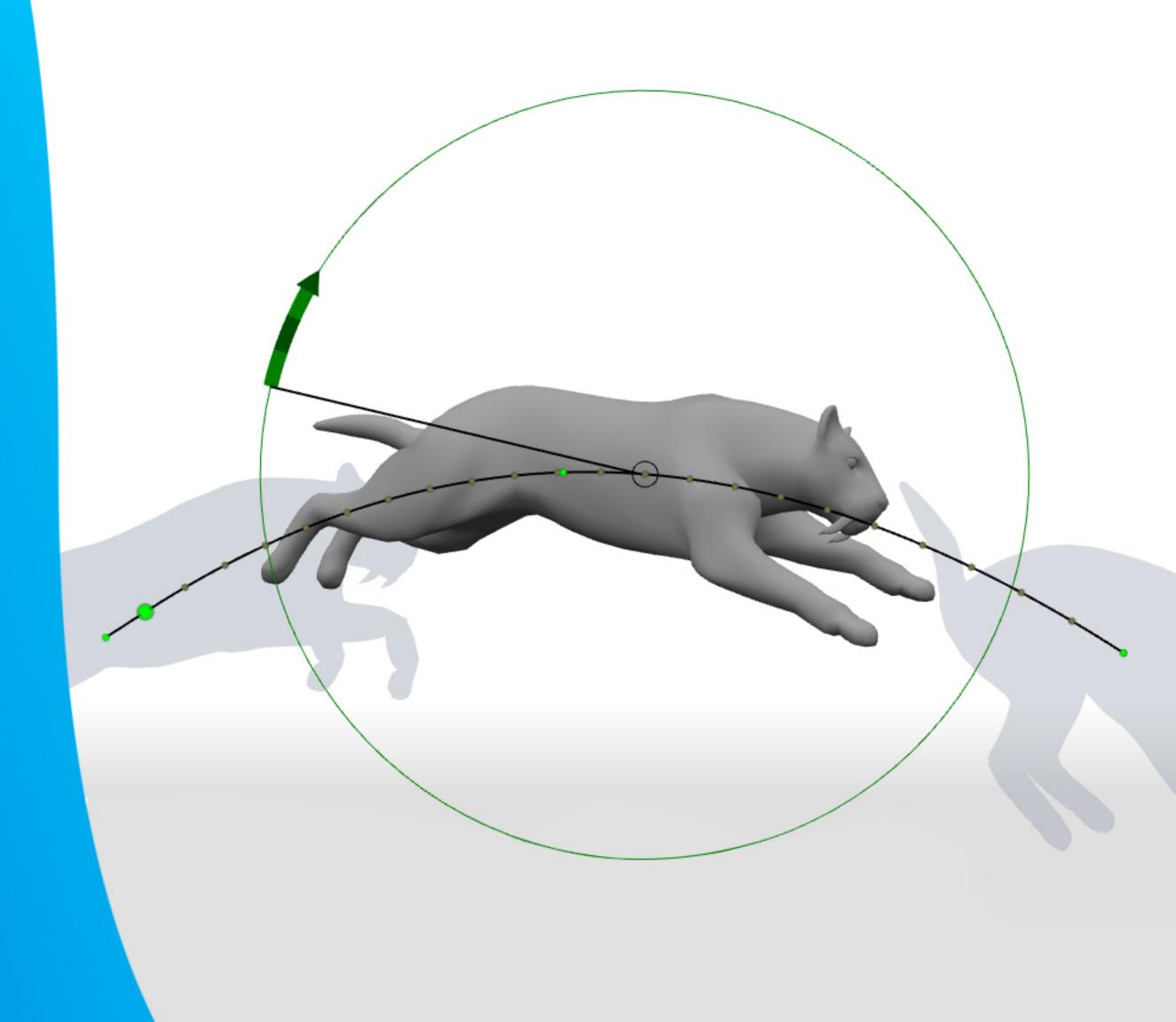












#### Basic

For individuals or teams with small animation projects

#### Free

Free for revenue <\$100k/yr

- Complete animation toolset
- Export max 300 frames and 120 joints limit
- Regular support
- Commercial use (for revenue <\$100k/yr)</p>

#### Рго

Complete solution for professional animations

\$300 / year

#### **Business**

For teams and companies who need personal support

\$1000 / year

- Everything in Basic
  - Unlimited Export
  - Priority support
  - Scene linking tool
  - Unlimited commercial use

- Everything in Pro
- Dedicated chat support
- Dedicated success manager (min 3 licenses)
- Influence on feature development priority

## **OUR BUSINESS MODEL**

Nekki used to be an indie studio for years and has a good understanding of the often tight financial situation of small developers. That's why we allow indie developers with an annual turnover below 100,000 USD to use Cascadeur for free. Our entry-level version "Cascadeur Basic" has only few functional limitations.

For established animators and companies with an annual turnover of over 100,000 USD we have "Cascadeur Pro" or "Cascadeur Business", which offer the full range of tools starting from only 300 USD per year.

## MEDIA INQUIRIES

Want to introduce Cascadeur to your readers and viewers? Or maybe invite our team members to speak at your event?

Feel free to contact us about anything and we will do our best to make it happen.

Please contact our Business Development Director Tom Borovskis via email at **t.borovskis@cascadeur.com** He will be glad to discuss your request with you.