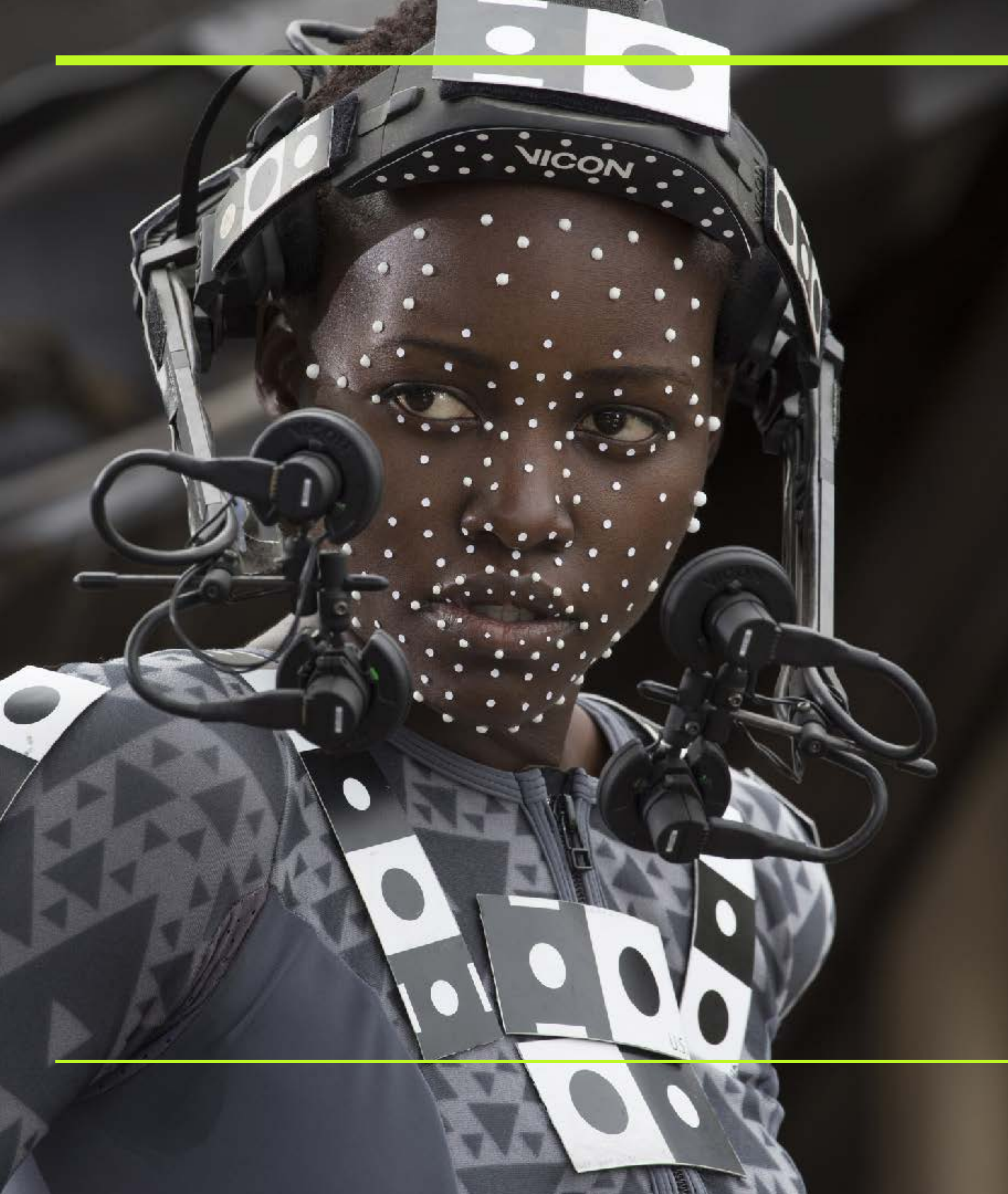


What do you know about Motion Capture?

What is Motion Capture?



Motion Capture

Wikipedia: ***Motion capture*** (sometimes referred as ***mocap*** or ***mo-cap***, for short) is the process of recording high-resolution ***movement*** of objects or people into a computer system.

- 🎭 Capturing body movement for digital animation.
- Used in 🎬 film, 🎮 games, 💃 dance, 💻 virtual production
- Also used in the 🇺🇸 military, 🏥 medical, and 🏃 sports applications.

IMC



INERTIAL MOTION CAPTURE (IMC)
SENSORS ARE USED TO TRACK AND RECORD MOVEMENT BY MEASURING ACCELERATION, ROTATIONAL VELOCITY, AND SOMETIMES MAGNETIC FIELD ORIENTATION

Types of mocaps

OMC



OPTICAL MOTION CAPTURE IS A TECHNOLOGY THAT USES CAMERAS AND REFLECTIVE MARKERS TO TRACK THE MOVEMENT OF OBJECTS OR PEOPLE IN THREE-DIMENSIONAL SPACE

♥ LOVE DEATH
✕ + ROBOTS

NETFLIX



**LOVE DEATH + ROBOTS | Live Horse
Motion Capture | Netflix**

Mocap in Popular Animation

Love, Death & Robots

- [Wikimedia](#): *Love, Death & Robots* is an adult animated anthology television series created by Tim Miller and streaming on Netflix.
- Anthology series using stylized digital animation.
- Many episodes use motion capture for realism in character movement.
- Example: The Witness — exaggerated, fluid, and body-based storytelling.

How does motion make the scene feel real or surreal?



Hill Agency Purity Decay - Official Trailer



Hill Agency: PURITYdecay | Gameplay PC

Game Design & Embodiment

Meagan Byrne – Achimostawinan Games

- Website: *A detective mystery game where you play as a tough as nails P.I. solving everything from petty crimes to global conspiracies all while exploring the various different worlds that make up North America of the future.*
- Métis game designer using mocap for narrative embodiment.
- Hill Agency: PURITY&decay — characters reflect Indigenous worldviews and movement.

How can movement reflect culture and identity?

Experimental Motion + Sound

David Rokeby – Very Nervous System (1986–2004)

- Website: *Very Nervous System* is [an] interactive sound installations... I use video cameras, image processors, computers, synthesizers and a sound system to create a space in which the movements of one's body create sound and/or music.
- Early example of motion tracking as art (not using suits, but camera sensors)
- Influenced embodied digital media practices — connects mocap to sound + space

What happens when we *play* with our body as input?



David Rokeby, Very Nervous System
(1982-1991)



PERCEPTION NEURON[®] 3

The Perception Neuron 3 (PN3) is a motion capture system utilizing **inertial measurement unit (IMU) sensors** to **track full-body movement**.

- Data exported and retargeted to **Blender** rigs (and many others).



Looking Ahead: Motion in Your Scene

Think briefly about these questions.

- **What kind of movement fits your character?** 🏃‍♂️ 💃 🤸‍♀️ 🕺 🤖 🧑 🐉 🦾 ...
- **How does your character's gesture tell a story?** 🙌 🙌 🤔 😡 😞 🤝 ✨ ✨ 🌀 💥 ...
- **What moment will you record with the mocap suit?** 💬

📢 Let's do a round and share your ideas.

Instructions

tinyurl.com/summercamp-mocap

