



Antoine COSTES

34 years old, born 26th September 1989
French driving license

3 rue des martyrs de la Libération
31400 Toulouse

antoine.costes@gmail.com
+33 (0)6 16 09 01 26

Smart systems engineer
Phd in haptics & Human-machine interfaces
Robotician for performing arts

French, English: fluent, technical
German: C1
Korean, LSF: beginner

www.antoinecostes.net
<https://www.behance.net/antoinecostes>

Background

2021-2024 **Smart systems engineer for performing arts, new media artist**
Freelancer

See next pages

2019-2021 **Prototyping innovative actuators for virtual reality**
Development engineer / Inria Rennes Startup Studio

Rennes

Mechatronic design of a gyroscopic actuator
Study of motion perception in virtual reality
ref: anatole.lecuyer@inria.fr (conseiller scientifique et directeur de thèse)

2015-2018 **PhD on haptic images for touchscreens**
Phd student / Technicolor R&I, Inria Rennes (HYBRID team)

Rennes

Haptic and pseudo-haptic rendering solutions for tactile image
[MT180 contest \(in French\)](#)
ref: philippe.guillot@interdigital.com (encadrant de thèse)

2012-2014 **Interactivity designer, real-time multimedia engineer**
Freelancer

Lyon, Grenoble

see [portfolio](#)

Studies

2015-2018	CIFRE (industrial) PhD in haptics (dir. Anatole Lécuyer)	Technicolor, Inria Rennes
2014/2015	Master 2 in smart systems - Ingénierie des systèmes intelligents	UPMC (Paris 6)
2009-2012	Mechanical engineering degree - Génie Mécanique Développement	INSA Lyon
2007-2009	Preparatory class PCSI-PSI	E.N.C.P.B. Paris
2007	High school baccalaureate (scientific)	Lycée Maurice Ravel

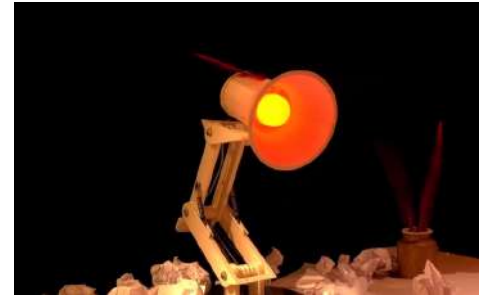
Robotics for performing arts

2022-2023 (20 weeks)

Animatronics for a [magie nouvelle](#) show

compagnie Sans Gravité

- Wifi control of servomotors, stepper & DC motors, LED
- ESP32 Firmware + open-source software solution
- Training of the technician and technical support



2021-2023 (3 weeks)

Control of a robot vacuum cleaner for a [dance chow](#)

compagnie La Contrebande

- Implementation of the Roomba API on ESP32
- Real-time control with bluetooth gamepad
- Software solution for choreography design



2018-2023 (10 weeks)

Singing animatronics for [multidisciplinary show](#)

compagnie Un Pied sur la Planche

- Real-time control with joystick and microphone
- Piloting with automations in Ableton Live
- Light, sound and robotics management on one laptop



2014 (7 weeks)

Motorised [light scenography](#) for a gig

compagnie Loudmila Projets

- LED strip motorisation
- Spatial LED control with video
- Videoprojection on motorised screens



Interactives installations (selection)

2022-2023 (6 weeks)

Augmented [Taengwha painting](#)

Presented at [Yulpo beach](#) October 2022 (South Korea)

Presented at [Psych.e](#) June 2023 (Paris, France)

collaboration with [Yuji KIM](#), taengwha painter

- 1-person contemplative installation
- Interactive videomapping on canvas



2022-2023 (10 weeks)

Les boîtes qui chantent

Présenté at [DNA 2022](#) (Grenoble)

Silly singing automatons

Autonomous connected objects

ESP32, MP3 reader, servomotors



2021-2022 (6 weeks)

Travel kit dispenser for time travelling tourists

Presented in 5 street art festivals in Korea in 2022

collaboration with [Salgoce](#)

Street installation, immersive narration

Video, LED, neons, servomotors, presence sensors

Raspberry Pi, ESP32, Chataigne



2014 (6 weeks)

Interactive scenography of a plastic work

[#StreetArt](#) exhibition, winter 2014-2015 (Paris)

collaboration with [Isaac Cordal](#), [Vhils](#), [Goin](#)

Light and interactivity design of Follow the Leader installation

Light and sound screenwriting (day/night cycle)

Addressable LED inserted in the artwork and piloted with video



Skills

Field	Langages, frameworks and softwares		Hardware
	Proficiency	Certain ease	
Connected objects	C++ / Arduino	Android, webservers	ESP32, various sensors
Virtual reality		C# / Unity	HTC Vive Pro
Robotics / haptics	CHAI3D	ROS	Virtuose, Falcon, Viper
Interactivity	Chataigne, Processing, Ableton Live	python, Max/MSP, javascript	Kinect, Leap Motion, raspberry Pi
Videomapping	Resolume Arena	Touch Designer	Augmenta
Engineering	Matlab, Simulink	Fusion360, ANSYS	