

# Alan Guedes | C.V.

London – UK

✉ a.guedes@ucl.ac.uk • 🌐 alanlivio.github.io • in alanlivio • 🐦 alanlivio  
🔗 alanlivio • 📄 alanlivio

## Shorbio

I am Computer Scientist (PhD & Postdoc), and my career can be seen threefold. In research, I have contributed to research projects and committees ([ACM SIGMM](#) and [SBC WebMedia](#)), and am currently interested in the intersection of Multimedia & Machine Learning. In the industry, I have added value by contributing to applied projects and standards at industry forums ([ITU-T SG16](#) and [BR TV Forum](#)). In teaching, I have acted as an undergrad lecturer and postgraduate assistant, and I also seek to get involved in public engagement and promote student interests in social impact.

## Experiences

### Work

#### UCL, LASP Lab

*Postdoc Researcher on ML project* 2021–today  
Highlights: EPSRC project; ACM SIGMM committees and workshop organizer; co-supervised undergrad students.

#### PUC-Rio, TeleMidia Lab

*Postdoc Researcher on ML & Multimedia projects* 2017–2020  
Highlights: project PI; team leader; standards contributions; SBC WebMedia committees and workshop organizer (students for social impact); co-supervised under/postgrad students; postgraduate lecturer assistant.

#### Dynavideo, TV Division

*Research Engineer on World Bank funded Brasil4D project* 2012–2012  
Highlights: multiple awarded social impact project.

#### Dynavideo, TV Division

*Part-Time Intern software developer* 2007–2008  
Highlights: prototype TV software in ST boards.

### Education

#### PUC-Rio

*PhD. in Informatics. [Multimodal-multiuser support in markup multimedia languages](#)* 2013–2017  
Highlights: thesis used in SBTVD standard; industry committees.

#### UFPB

*MSc. in Informatics. [Multi-device support in TV app stores](#)* 2010–2012  
Highlights: thesis used in the awarded World Bank funded Brasil4D project; undergraduate lecturer; project leader

#### UFPB

*BSc. in Computer Science* 2005–2009  
Highlights: Algorithms undergraduate tutor.

## Research

### Publications

Google Scholar shows >50 published papers, >100 citations, h-index 6. See below recent and some selected publications.

*Elsevier Book Chapter* 2022

*ACM Multimedia Systems* 2022

*Springer Journal on Multimedia Tools and Applications* 2016, 2020

*IEEE Symposium on Multimedia (ISM)* 2020

*SBC WebMedia* 2020, 2020, 2020, 2021, 2021, 2021

*ACM Symposium on Document Engineering* 2019

## Projects on Machine Learning

- SpheryStream (Funded by EPSRC): Improve 360-video streaming with profile-based methods
- VideoMR (Funded by RNP and Microsoft): detect inappropriate content in video scenes
- AML – Anti-Money Laundry (Funded by BTG Bank): Financial risk identification and anomaly detection

## Projects on Multimedia systems

- PUC-Rio Ginga reference implementation, funded by PUC-Rio Software Licenses to TV manufacturers
- SBTVD Conformance Test Suite for TV for Ginga implementers
- GT-RAP (Funded by RNP): blockchain-based authentication of academic certificates
- GingaAppStore (Funded by RNP): design broadband system to deliver TV applications
- Art TVDI (Funded by RNP): design agile methods for TV applications development
- Ginga CDN (Funded by RNP): develop reusable TV middleware components.
- Brasil4D (Funded by World Bank): design a transmission of social impact TV content to low-income families. Its results were published at a [public report](#)

## Awards

Approved as PI in [VideoMR](#) project (Funded by RNP and Microsoft) 2019

Brasil 4D 2013-2014

- SET Conference Award for Best TV interactivity solution
- TV Award Honorable mention in Innovation and Creativity
- FRIDA Award for innovative TV technological solutions

GingaStore 2012

- ITU IPTV Application Challenge Honorable mention in User-friendliness

Travel Awards 2017-2022

- SIGMM Travel Award for MMSys (2022)
- SIGWeb Travel Award for DocEng (2017, 2019)
- SIGHI Gary Marsden Travel Award for IMX (2022)

## Committees

### ACM

SIGMM contributor 2020-today

- Multimedia conference: reviewer (2022), area chair (2022), reproducibility chair (2023)
- Multimedia Systems (ACM MM): MMVE review (2021, 2022, 2023) and demo chair (2022)
- Immersive Experiences(ACM IMX) conference: reviewer (2022) and area chair (2022)
- QoMex conference (ACM QoMEX): reviewer (2023)

### Brazilian Computing Society (SBC)

Multimedia Especial Committee 2017-today

- WebMedia conference: Steering Committee (2019-today), reviewer (2013-today), chair of Undergrad workshop (2018), chair of Demos Workshop (2019-today), and chair of Social Impact Workshop (2018-today)

### Springer

Reviewer 2022-today

- Journal of Multimedia Tools and Applications: reviewer (2022, 2023)
- Iberoamerican Conference on TV Applications and Usability: reviewer (2020, 2021, 2022)

## Training

### UCL

Data Protection for Researchers; Fundamentals in Research Funding. 2022-2021

### Nature

Interpreting Scientific Results; Nature Focus on Peer Review. 2022-2023

## Industry

## Committees

### Brazilian TV Forum (SBTVD)

Academic member at [Technical Module](#) contributing to [TV middleware standards](#) 2017-2021

## Teaching

---

### Experiences

---

#### **PUC-Rio**

Lecturer assistant on *Multimedia and Machine Learning* to postgrad students (>20) 2019

Lecturer assistant on *TV development (Ginga Brasil, Funded by RNP)* to undergrad students (>30) 2013

#### **Japan International Cooperation Agency**

Lecturer (and course design) on *TV development* to South American countries professionals(>20) 2012

#### **RNP ESR**

Assistant on *Linux Administration* to IT professionals (>20) 2011

#### **UFPB**

Lecturer (and course design) on *Programming Introduction (C language)* to undergrad students(>30) 2010

Lecturer Assistant on *Analysis and design of Algorithms* to undergrad students (>30) 2008

### Public Engagement

---

Chair of *SBC WebMedia* workshop to students researching on *Social Impact* 2018-today

*Brasil4D* social impact project to low-income families 2013-2014

## Skills

---

**Languages:** Portuguese (mother tongue), English (advanced, SELT certification), and Spanish (advanced).

**Programing:** Python, Bash, C++, Lua, Java, JavaScript, GitHub Actions, Docker.

**Social:** Good and empathic communication. Positive, make-it-happen, team-work, lead-by-example attitude.

**Academic:** Scientific and standard writting. Teaching and presentation skills.

## References

---

- Laura Toni <l.toni@ucl.ac.uk>: Postdoc. supervisor at UCL.
- Simone DJ Barbosa <simone@inf.puc-rio.br>: PhD supervisor at PUC-Rio.
- Marcelo Moreno <moreno@ice.ufjf.br>: ITU SG-16/Q13 and SBTVD collaborator.
- Roberto Azevedo <roberto.azevedo@disneyresearch.com>: TeleMidia collaborator.