Alan Guedes | C.V.

London - UK

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

Software 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

 $Highlights:\ the sis\ used\ in\ SBTVD\ standard;\ industry\ committees.$

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

Approved as PI in VideoMR project (Funded by RNP and Microsoft)

2019

Brasil 4D

GingaStore

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

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)

Mulimedia Especial Commitee

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

Interpreting Scientific Results; Nature Focus on Peer Review.

2022-2023

Industry

Committees

Brazilian TV Forum (SBTVD)

Academic member at Techincal Module contributing to TV middleware standards

2017-2021

International Telecommunication Union (ITU)

Academic member at SG-16/Q13 contributing to IPTV 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 (>3 | 30) 2013 |
| Japan International Cooperation Agency Lecturer (and course design) on TV development to South American countries professionals(>20) |) 2012 |
| RNP ESR | 2011 |
| 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 2 | 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 <1.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.