Dr. Luis Peña Sánchez
Artificial Intelligence and Game Designer

Date of Birth: 06 / December /1977 Nationality: Spain Mobile Phone: +34 646 81 85 25	E-mail: luis.penya@udit.es

Education
PhD in Computer Science.

Gaming with Emotions: An Architecture for the Development of Mood-Driven Characters in Video Games.

Partially support by "Ayudas para la Contratación de Personal Investigador de Apoyo" Comunidad de Madrid Grant. Universidad Rey Juan Carlos de Madrid. Campus de Móstoles.

Defended: September 2013 GPA: 10- Honors

Postgraduate Certificate in Education.

Speciality: Mathematics.

Universidad Complutense de Madrid. *June, 2006.*

Master in Computer Science

Universidad Rey Juan Carlos de Madrid. *June, 2005.*

Bachelor in Computer Science

Universidad Rey Juan Carlos de Madrid. *September, 2000.*

Work Experience
September 2019 – Associated Professor & Researcher

ESNE - UDIT

- R&D in Video Games, Animation and Digital Design. Artificial Intelligence & Machine Learning Professor.

September 2018 – September 2019 Dean of Technology

ESNE - UCJC.

- R&D in Video Games, Animation and Digital Design. Studies design for undergraduate and graduate.

February 2015 – CEO and Co-Funder

Lurtis Rules S.L.

- Bussiness Development and Product Manager. I'm also in charge of the technical artist department.

October 2014 – September 2018 Associate Professor of Computer Science

Universidad de Tecnología y Arte Digital (U-TAD).

- Lecturer in computer science degree.

September 2013- September 2018. Associate Professor

Support Researcher. Comunidad de Madrid/ Universidad Rey Juan Carlos.

- **Lecturer in the Official Master Degree of Computational Graphics, Virtual Reality and Video Games.** Character Modelling and Artificial Intelligence.
- **Lecturer in the Degree of Computational Engineering.** Sequential Machines, Automatas and Formal Languages.

October 2014 – February 2015 Academic Director of BigData Business School

MBIT-School.

- Development and management of the product portfolio, technology watch, alliances and, collaborations.
- Responsible for technology disclosure and admissions.
- Supervision and alignment of teaching content, team management.

September 2013 – October 2014 Director of Undergraduate Studies in Computer Science

Lecturer. Universidad de Tecnología y Arte Digital (U-TAD).

- Lecturer in computer science degree.
- Supervisor of the academic area of the computer science degree.
- Management of the degree teaching staff.

September 2008- September 2013. PhD. Researcher

Support Researcher. Comunidad de Madrid/ Universidad Rey Juan Carlos.

- Providing support in the research projects of the Group of Artificial Intelligence at the Rey Juan Carlos University.
- Development of the Doctoral Thesis in the Applied Techniques to Video Game Characters.
- **Lecturer in the Official Master Degree of Computational Graphics, Virtual Reality and Video Games.** Character Modelling and Artificial Intelligence. Courses 2010-11, 2011-12 y 2012-13.

- ***Lecturer in the Degree of Computational Engineering.*** Sequential Machines, Automatas and Formal Languages. Course 2012-2013. Knownledge Bases Systems. Course 2012-2013.

September 2003- September 2008. Tenured Lecturer of Higher Level Educational Cycle (*eq. NVQ-Level 4/Foundation Degree*) in Computer Science.
CEPAL.
- **Head of Department of Management Information Systems**

September 2003 - September 2008. Freelance Developer.
CNICE. Ministry of Education. Madrid.
- Development of educational enviroment solutions.
- Evaluation and Development of educational resources.

May 2003 – September 2003. IT Intern.
CNICE. Ministry of Education. Madrid.
- Operating System Development for High School Centers.

June 2000 – November 2002. J2EE Analyst / Programmer
Advcanced Qualty Solutions. Madrid.
- J2EE Application Development.

January 1998 – June 2000. Research Intern.
Department of Statistics and Operational Research. Universidad Rey Juan Carlos. Móstoles. Madrid.
- Support in department researches.

Research Projects

Industrial R&D Projects

AI-MIND. *H2020 SC1-BHC-06-2020.* Consortium – Partner Lurtis Rules. Supervisor: Dra Ira Haraldsen. 2021-2026.

EdTech Talents. *HORIZON-WIDERA-2022-TALENTS-03-01.* Consortium – Partner Lurtis Rules. Supervisor: Dra Janika Leoste. 2023-2025.

Academia4Business. *ERASMUS+ 2022-KA220HED-06.* Consortium Partner – Lurtis Rules. Supervisor: Dra Janika Leoste. 2023-2024.

Innovative methodology based in circular economy and artificial intelligence to foster the transition to Sustainable and very high eNergy performance bUildinGs at a cost optimal (SNUG). *HORIZON-CL5-2022-D4-02.* Consortium Partner – Lurtis Ltd. Supervisor: Dra Amparo Roca. 2021-2026.

Asistente Inteligente De Modelado Procedimental De Escenarios Y Entornos (KUMAL). *CDTI-CL5-2022-D4-02.* Lead Partner– Lurtis Rules. Supervisor: Dr Luis Peña. 2021-2024.

Artificial Intelligence for Energy Efficient Envelope Design for Buildings (AI4E3nvelope). *MCIIN PLEC2021-007962.* Lead Partner – Lurtis Rules. Supervisor: Dr Santiago Muelas. 2021-2024.

Artificial Intelligence Applied to Residential Architecture (BIMBOT). *EUROSTARS.* Lead Partner – Lurtis Ltd. Supervisor: Dr Jose M. Peña. 2021-2024

University R&D Projects

Intelligent human agent societies (iHAS). *MINECO, Project TIN2012-36586-C03-02.* Universidad Rey Juan Carlos de Madrid. Supervisor: Dr Holger Bilhart. 2013-2015.

Organizaciones Virtuales Adaptativas: Técnicas y Mecanismos de Descripción y Adaptación (OVAMAH). *MICINN, Project TIN2009-13839-C03-02.* Universidad Rey Juan Carlos de Madrid. Supervisor: Dr. Alberto Fernández Gil. 2010-2012.

Agreement Technologies. *MINECO, Programme Consolider CSD2007-0022, INGENIO 2010.* Universidad Rey Juan Carlos.Supervisor: Prof. Dr. Sascha Ossowski. 2008-2012.

Muesos 2.0..Universidad Rey Juan Carlos. Supervisor: Prof. Dr. Sascha Ossowski. 2008-2010.

Grants

Contract of Research Support Staff of Comunidad de Madrid. Departament of Architecture and Computer Technologies. University Rey Juan Carlos. 2008- 2013.

Grant of Infomation and Technology. Ministery of Education, (CNICE). May 2003- September 2003.

Partial Grant. Department of Statistics and Operational Research. University Rey Juan Carlos. 1998-2000.

Languages

Spanish. Native. **English.** Conversation: high. Write: high. Read: high.

Research Visitor

GAIPS en el Instituto de Engenharia de Sistemas e Computadores Investigação e Desenvolvimento em Lisboa
  Lisbon, Portugal: March – April 2011
School of Computer Science & Electronic Engeenering, Universidad de Essex
  Colchester, United King dom: January – March 2012 y November – December 2012

Publications

Google Scholar
Research Gate

Peña, L., J. M. Peña, S. M. Lucas and S. Ossowski, " *Learning and evolving combat game controllers*", IEEE Computational Intelligence in Games 2012,

Peña, L., J. M. Peña, and S. Ossowski, "*Representing Emotion and Mood States for Virtual Agents*", MATES 2011, vol. 6973, Berlin, Springer-Verlag Berlin Heidelberg, pp. 181-188, 09/2011

Peña, L., J. M. Peña, S. Ossowski, and J. A. Sánchez, "*EEP – A lightweight emotional model: Application to RPG video game characters*", IEEE Computational Intelligence in Games 2011, 08/2011.

Peña, L., J. - M. Peña, S. Ossowski, and P. Herrero, "*WereWoLF: Evolving Q-Learning for Stochastic Games*", World Automation Congress, WAC, Kobe, IEEE, 10/2010.

Peña, L., J. - M. Peña, S. Ossowski, and P. Herrero, "*Evolving Q-Learners for Stochastic Games (Extended)*", Congreso Español sobre Metaheurísticas, Algoritmos Evolutivos y Bioinspirados, MAEB'2010, Valencia, 09/2010

Peña, L., S. Ossowski, and J. - M. Peña, "*vBattle: A new framework to simulate medium-scale battles in individual-per-individual basis*", Computational Intelligence and Games, 2009. CIG 2009. IEEE Symposium on, pp. 61-68, Sept., 2009

Peña, L., A. LaTorre, J. - M. Peña, and S. Ossowski, "*Tentative Exploration on Reinforcement Learning Algorithms for Stochastic Rewards*", HAIS, pp. 336-343, 2009.