

Gonçalo N. Paiva Amador

🏠 Peniche, Portugal · 🇵🇹 Portuguese · 📅 27/07/1983 · ♂ Male · 🧑 Single
☎ (+351) 96-281-68-58 | ✉ g.n.p.amador@gmail.com | 🔗 [g-amador](#) | 💬 [gnpa_skype](#)

"First, solve the problem. Then, write the code." John Johnson

👤 Summary

Software Engineer, Project Researcher, Laboratory Professor, and Scientific Presenter with over 9 years of experience. Highly motivated, communicative, self-sufficient, and versatile professional with solid academic background in Computer Science and Engineering, namely in: Game Engine Technologies, Teaching methodologies, HPC, and HCI. Known as a team player, multi-tasker, constant self-driven learner; strive to address novel and exciting challenges by integrating, adapting, developing novel knowledge/tools. Preference to work with and/or manage teams in order to grow personally and professionally.

⚙️ Research Interests

- Multi-touch, Voice and Camera-based HCI technologies.
- 3D Animation/Modelling and Geometrical Computing.
- Multi-Core CPU/GPU and Cloud computing.
- Computational Fluids Dynamics (CFD).
- Artificial Intelligence, Robotics, and Cybernetics.
- Computer Games & Gamification.

📊 Skills

Programming/meta Languages & APIs/Frameworks:

- C/C++, C#, Java, shell scripting, SQL, CUDA/OpenMP/OpenCL/MPI, OpenGL, HTML/CSS/JavaScript/XML, UML, LaTeX.

Productivity tools:

- Git/SVN, Gimp, Skype, Google Chrome, Mozilla Firefox, LibreOffice, Blender, Eclipse/Netbeans/VisualStudio 2005-current.

Operating Systems Usage:

- MS Windows (2003-2008 server, 7,10), Linux (Ubuntu, Mint Cinnamon, Fedora, and OpenSuse), Android and iOS.

📁 Experience

INSTITUTO DE TELECOMUNICAÇÕES AND GRAPHICS & MEDIA LABORATORY

Covilhã, Portugal

PhD Researcher for <Foundation for Science and Technology>

Jan. 2012 - Present

- Engineering and design of a novel modular game engine architecture.
- Implementation and development of novel pathfinders reactive to influence maps.
- Conducting research and case studies on leading edge algorithms and technologies. Writing scientific papers.
- Lecturing about achieved results and possible new research trends.

Research Associate for <PTDC/EIA/70830/2006, MOGGY - A Browser-Based Massive Multiplayer Online Game Engine Architecture> Project

Mar. 2008 - Dec. 2011

- Implementation of a game engine to test state management processing, storage and communication techniques.
- Implementation of Grid-based solutions to transform multi-player games into MMOGs.
- Conducting research and review the state of art regarding Massive Multiplayer Online Games (MMOGs).

UNIVERSIDADE DA BEIRA INTERIOR

Covilhã, Portugal

Lab Instructor for the 11498-Computer Science and Engineering &

11156-Game Design and Development: Video Games Technologies Course

Jan. 2012 - July 2016

and the 5385-Computer Science and Engineering: Computer graphics Course

Jan. 2012 - July 2012

- Developed laboratory course material, including practical sheets and tests (available upon request).
- Responsible for 0.5 hour lecture and supervision of 1.5 hour laboratory.
- Participated in practical project joint assessment with course supervisor.

Research Associate for <POCI/V/04.01302/0155/0002/2006, "Metodologias Dinâmicas para o Sucesso em Matemática" Project

July 2007 - Apr. 2008

- Creation of dynamic contents (presentations and work sheets) for theoretical and laboratory mathematics courses.
- Integration of dynamic content with a content management system (CMS), assessment and extension of CMSs.
- Research, implementation, and testing of novel modern ways to divulge a math department.

Certifications

SAP

SAP HANA Cloud Platform* Essentials

online

April. 2017 - May 2017

- [openSAP](#)
- [Online Certificate](#)
- Valid from March 29, 2017 - Present

SAP HANA Cloud Platform* Essentials

Feb. 2017 - March 2017

- [openSAP](#)
- [Online Certificate](#)
- Valid from March 29, 2017 - Present

Extending SAP S/4HANA with SAP HANA Cloud Platform*

Jan. 2017 - March 2017

- [openSAP](#)
- [Online Certificate](#)
- Valid from February 28, 2017 - Present

CISCO

CCNA Routing and Switching: Introduction to networks

Covilhã, Portugal

Oct. 2013 - Jan. 2014

- [Cisco NetAcad](#)
- Valid from Jan. 2014 - Present

Additional Information

Researcher with 9 international scientific articles published (1 journal and 8 conferences).

Keynote speaker at 8 technical, technological and scientific events.

B1/B Drivers license

Education

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, UNIVERSIDADE DA BEIRA INTERIOR

Covilhã, Portugal

PhD in Computer Science and Engineering (?/20 points)

Jan. 2012 - Present

- Thesis: Influence-based Motion Planning Algorithms for Games
- Advisor: [Professor Abel Gomes](#)
- **Availability to start working on April 1 of 2017, requiring a week off for the thesis defense (expectedly May/June).**

Bachelor's Degree in Information Technologies and Systems (15/20 points)

Sept. 2010 - July 2011

- Final Project: Seamless zoning algorithms for MMOGs over a Grid (18/20 points)

Master's Degree in Computer Science and Engineering (18/20 points)

Sept. 2007 - Oct. 2009

- Final Thesis: Real-Time 3D Rendering of Water using CUDA (19/20 points)
- Advisor: [Professor Abel Gomes](#)

Bachelor's Degree in Computer Science and Engineering (13/20 points)

Sept. 2002 - July 2007

SECONDARY/HIGH SCHOOL OF PENICHE

Peniche, Portugal

High school Professional Degree in Electrotechnology and Electronics

Sept. 1998 - July 2001

Languages

Proficient User (CEFR:L:C2): Portuguese (Native), English.

Basic User (CEFR:L:A1): Spanish, French.