Gonçalo N. **Paiva Amador**

Lisbon, Portugal · *Portuguese* · *27/07/1983* · *Male* · *Single*

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

👤 Summary

Software developer in several programming languages, also with experience in primary technical contact point with one or more clients, assisting in planning, debugging, and supervising ongoing critical business applications. Former Project Researcher, Lab Instructor, and Scientific Presenter with 9+ Yrs of experience. Highly motivated, communicative, and self--sufficient professional with solid academic background in C.S. & Engineering, namely in: Game Engine Technologies , Teaching, HPC, Geometric Computing, and HCI. Known as a team player and constant self-driven learner; striving to address novel and exciting challenges. Preference to work with and/or manage teams in order to grow personally and professionally.

⚙ Areas of Interest

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

📊 Skills

Programming/meta Languages & APIs/Frameworks:

C/C++[4], C#[2][5], Java[4][5], ASP Classic[5], Prolog[2], OCaml[2], shell scripting[4], PL/SQL[5], T-SQL[2][6], JSP/jQuery/Ajax/JSON/Bootstrap[5], Angular & Node.js[5], Apache Struts[5], OpenGL[4], CUDA/OpenMP/OpenCL/MPI[3], HTML/CSS/JavaScript/XML[3][6], UML[2], LaTeX[4].

Productivity tools:

Azure DevOps[5], Team Foundation Server (TFS)[6], Zendesk[5], Redmine[5], Git[3][5], SVN[2][5], Apache Maven[2][5], Apache Ant[4][5], Apache Tomcat[5], LibreOffice[4], Eclipse[3][5], Netbeans[4], Oracle SQL developer[6], Visual Studio 2005-current[4][5], Visual Studio Code[5], MS Office Suite[6], MS SQL-server 2012-2017[2][6], PowerBI[5], Skype/Skype for Business[5], Google Chrome[6], Internet Explorer[4][6], Teamviewer[4][5], SoapUI[5], Postman[5], Swagger[5], IIS 6-8[5].

Operating Systems Usage:

MS Windows 2003-2016 server, XP - 10[4][6], Linux (Ubuntu, Mint, Fedora, and OpenSuse)[4], CiscoIOS[5].

Academic: <1 Yr[1], 1 - 2 Yrs[2], 3 - 5 Yrs[3], 5+ Yrs[4]   **Professional**: <1 Yr[5], 1 - 2 Yrs[6], 3 - 5 Yrs[7], 5+ Yrs[8]

💼 Experience

AMARIS (PROFESSIONAL)   *Lisbon, Portugal*
ASP classic Developer   June 2019 - Present

Context: adaptive, perfective and corrective banking software development.
Functions: developing T-SQL queries and jobs. Adaptive, perfective and corrective banking application development.
Technologies: Skype/Skype for Business, Internet Explorer, MS Office Suite, MS SQL-Server 2005, T-SQL, ASP classic, HTML/CSS/JavaScript/XML, Windows 10.

Software and Oracle Database Developer   Jan. 2019 - June 2019

Context: account migration among banks, adaptive, perfective and corrective banking software development.
Functions: inspecting PL-SQL queries, the sequence of queries, and then fine tuning those queries prior to sending data. Day to day support activities, investigate and address issues regarding quality of sent data with the business area. Adaptive, perfective and corrective banking software development.
Technologies: Redmine, Skype/Skype for Business, MS Office Suite, Apache AirFlow, Apache Ant, Apache Maven, Apache Tomcat, Apache Struts, Eclipse, Oracle SQL developer, PL-SQL, Java 6-8, Windows 7/10.

Technical Account Manager Feb. 2018 - Dec. 2018

Context: Primary technical contact point with one or more clients, assisting in planning, debugging, and supervising on-going critical business applications.

Functions: provide technical support for customers to support pre-sales and post-sales processes, address all product-related queries on time, create learning materials and train customers to use products effectively, assist in the creation of support documentation for existing software/service products, provide developers with customer's feedback to help identify potential new features or products, report on product performance, identify solutions to reduce support costs, analyze customer's needs and suggest upgrades or additional features to meet their requirements.

Technologies: Azure DevOps, TFS, IIS 6-8, VNC, mRemote, Cisco AnyConnect, FortiClient, Teamviewer, Skype/Skype for Business, WebEx, MS Office Suite, Postman, SoapUI,Zendesk, Internet Explorer, PowerBI, SSRS/SSIS/SSAS, MS SQL-server 2012-2017, T-SQL, Windows 7.

RedIT (**Professional**) *Lisbon, Portugal*

Software Consultant Oct. 2017 - Jan. 2018

Context: Adaptive software development and integration with Model-Based architecture for an energy sector company .

Functions: Integration of Uber-like functionalities into existing Model-Based architecture modules. PL-SQL database replication. Integration, algorithm development, and prototyping of route calculation and schedule assigning software into existing Model-Based architecture modules.

Technologies: Slack, Git, Visual Studio 2017, MS SQL-server 2016, Oracle SQL developer, C#, T-SQL, PL-SQL, JavaScript, Windows 7.

Software Consultant Aug. 2017 - Sept. 2018

Context: Adaptive, perfective and corrective software maintenance for an information management system used in the areas of social action and health , lets refer to it as X.

Functions: Extension and maintenance of all Model-View-Controller (MVC) functionalities, including models, views, controllers, and SQL scripts to update and include new functionalities on X database. Functional and aesthetic bug resolution in views, controllers, and models of X.

Technologies: TFS, MS SQL-server 2014, Visual Studio 2013, JSP/jQuery/Ajax/JSON/Bootstrap, C#, Windows 7.

Software Consultant July 2017

Context: Perfective and corrective software maintenance in the integration of a login functionality managed by Azure AD within a near release vacation management online solution, lets refer to it as Y.

Functions: Study of Azure AD usage scenarios. Assessment on how to integrate (at the time) Y login process with Azure AD.

Technologies: Azure AD, Git, MS SQL-server 2016, Visual Studio 2017, Visual Studio Code, Angular2/4, JSP/jQuery/Ajax/JSON/Bootstrap, Node.js, C#, Windows 7.

Instituto de Telecomunicações and Graphics & Media Laboratory (**Academic**)

Research Associate for <PTDC/EIA/70830/2006, MOGGY - A Browser-Based Massive Multiplayer Online Game Engine Architecture> Project Mar. 2008 - Dec. 2011

Context: Study and ultimately attempt to Develop a game engine for MMOGs to work on the browser.

Functions: Develop a Java game engine prototype, to test state management algorithms. Assist in porting an existing multi-player game (Jake2) to a MMOFPS resorting to GridGain. Implement fluid simulators in the GPU. Elaboration and public presentation of scientific conference articles.

Technologies: GridGain, Jgroups, JogAmp, Apache Math Commons, OpenGL, CUDA/OpenMP/OpenCL/MPI Java 1.6, C/C++, LaTeX, Windows XP-7.

Universidade da Beira Interior (**Academic**) *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

Context: Lab. assistant in practical component of the video game technologies and computer graphics courses.

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

Technologies: Whiteboard, LibreOffce, JmonkeyEngine, NetBeans, Java 1.6-1.8, LaTeX, Windows XP-7.

Research Associate for <POCI/V/04.01302/0155/0002/2006, "Metodologias Dinâmicas para o Sucesso em Matemática> Project July 2007 - Apr. 2008

Context: Develop dynamic ways to dynamize a math department and math teaching at an university level.

Functions: Creation of dynamic contents (presentations and work sheets) for theoretical and laboratory mathematics courses, i.e., dynamic presentations intended to make math learning more interactive and available outside the class room.

Technologies: Blackboard, Mathematica, Matlab, LaTeX, Beamer, Windows XP.

✹ Certifications

SAP

Build Mobile Applications with SAP Cloud Platform Mobile Services (227.8/300) — Aug. 2019 - Oct. 2019

Online Certificate: `https://open.sap.com/verify/xicav-sakyr-fopyh-kyfal-tunah`
Valid from October 2, 2019 - Present

Object-Oriented Programming in Java (188.0/200) — June 2018 - July 2018

Online Certificate: `https://open.sap.com/verify/xocis-tyvip-gynuh-byneg-punel`
Valid from July 25, 2018 - Present

Cloud-Native Development with SAP Cloud Platform* (249.1/360) — Apr. 2018 - May 2018

Online Certificate: `https://open.sap.com/verify/xosen-nykel-vybup-susig-sihim`
Valid from May 30, 2018 - Present

Design Your First App with Build* (230.0/240) — Oct. 2017 - Nov. 2017

Online Certificate: `https://open.sap.com/verify/xoban-setyz-vogaf-leryz-lufor`
Valid from Nov. 9, 2017 - Present

Be Visual! Sketching Basics for IT Business (70.7/80) — Sep. 2017 - Oct. 2017

Online Certificate: `https://open.sap.com/verify/xuhos-fogot-hytyc-pybin-helen`
Valid from Oct. 12, 2017 - Present

Developing Java-Based Apps on SAP Cloud Platform* (234.3/300) — Apr. 2017 - May 2017

Online Certificate: `https://open.sap.com/verify/xuhes-rimus-bikon-roper-hicom`
Valid from May 18, 2017 - Present

SAP HANA Cloud Platform* Essentials (300/360) — Feb. 2017 - Mar. 2017

Online Certificate: `https://open.sap.com/verify/xulor-nynoz-soped-muvuv-zitek`
Valid from March 29, 2017 - Present

Extending SAP S/4HANA with SAP HANA Cloud Platform* (254.0/360) — Jan. 2017 - Mar. 2017

Online Certificate: `https://open.sap.com/verify/xugal-vaseb-firih-zadyd-deniv`
Valid from Feb. 28, 2017 - Present

Cisco — *Covilhã, Portugal*

CCNA Routing and Switching: Introduction to networks — Oct. 2013 - Jan. 2014

Valid from Jan. 2014 - Present

🎓 Education

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, UNIVERSIDADE DA BEIRA INTERIOR — *Covilhã, Portugal*

PhD in Computer Science and Engineering (18/20 points) — Jan. 2013 - June 2017

Thesis: Influence-based Motion Planning Algorithms for Games
Supervisor: Professor Abel Gomes
Context: Implementation of a modular game engine, suitable for teaching a video games technologies course.Path finding algorithms merged with influence maps.
Functions: Survey state-of-the-art regarding (i)modular game engine architectures, (ii)video game technologies teaching methodologies, (iii)influence maps and path finding algorithms. Game engine development (JOT). Implementation of a novel pathfinding algorithm, and two novel techniques to integrate influence maps with pathfinders. Writing of journal/conference scientific articles and thesis, presentation of conference articles, and thesis oral presentation/defense.
Technologies: GIT, NetBeans, Java 1.6-1.8, GridGain, JGroups, JogAmp, Apache Maven, Apache Math Commons, LaTeX, Linux Mint, Fedora, Ubuntu, OpenSuse, Windos XP-7 .

Bachelor's Degree in Information Technologies and Systems (15/20 points) — Sept. 2010 - July 2011

Master's Degree in Computer Science and Engineering (18/20 points) — Sept. 2007 - Oct. 2009

Thesis: Real-Time 3D Rendering of Water using CUDA (19/20 points)
Supervisor: Professor Abel Gomes
Context: Extending a 2D fluids simulation algorithm to 3D in the GPU resorting to CUDA.
Functions: Gathering/analysis of state-of-the-art regarding fluid simulation in virtual environments. Porting a 2D fluids simulation (Jos Stam Stable fluids) algorithm to 3D in the GPU resorting to CUDA. Writing of journal/conference scientific articles and thesis, presentation of conference articles, and thesis oral presentation/defense.
Technologies: Visual Studio 2005-2008, CUDA 2.0, C/C++, LaTeX, Linux Mint, Fedora, Ubuntu, OpenSuse, Windos XP-7 .

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 (CEFRL:C2): Portuguese (Native), English.
Basic User (CEFRL:A2): Spanish, French.

ℹ️ Additional Information

Researcher with 13 international scientific articles published (4 journal and 9 conferences).
Keynote speaker at 9 technical, technological and scientific events.
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