PEDRO BOECHAT

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🔗 [linkedin](https://linkedin.com)

🐙 [github](https://github.com)

📚 [stackoverflow](https://stackoverflow.com)

▶ [videos](https://youtube.com)

SUMMARY OF QUALIFICATIONS

Senior Programmer
- 13 years in the software industry
- 4 years in the academia

Computer Graphics Scientist
- [2 papers published](#) in Siggraph Asia
- Main research topic: procedural generation

Indie Developer
- $15k prize winner in a [nationwide game contest in Brazil](#)
- [10+ open source project](#) using different technologies

WORK EXPERIENCE

Lead Programmer	**Lab42 Games**	**Jan 2021 - Present**

- Porting a PC/Console title to Oculus Quest 2.

Senior Programmer	**Codemasters**	**Aug 2018 - Jan 2021**

- Worked on the new world editor used in the F1 game series:
  - Decoupled the entity system from the old editor and re-integrated it into the new editor.
  - Increased the robustness of the communication between the editor and the engine.
  - Extended the engine's entity system to support edit-time components.
  - Created a visual editor for the cutscene system scripting language.

Lead Programmer	**Bongfish**	**Apr 2017 - Jul 2018**

- Worked on the development of tools to synthesize realistic game scenery from real-world data for the new [Microsoft Flight Simulator](#):
  - Used ML techniques to segment and classify data from aerial images.
  - Built a cloud-based system to run large scale processes.
  - Generated 3D models at run-time using procedural modeling techniques.

Senior Programmer	**Bongfish**	**Apr 2016 - Apr 2017**

- Worked on the [Frontline game mode](#) for [World of Tanks](#):
  - Helped implementing new game mechanics, such as the respawn system.
  - Refactored important entities, such as the in-battle inventory.

WORK EXPERIENCE

Research Assistant   <u>Graz University of Technology</u>   **2014 - 2016**
- Researched GPU programming techniques applied to procedural generation:
  - Co-authored 2 publications in Siggraph Asia (once as <u>first author</u> and another as collaborator).
  - Co-supervised 2 Master's students.
- Developed a procedural scene generator for <u>Bongfish</u> under grant program (Innovationscheck 2016).

Research Assistant   <u>Pontifical Catholic University</u>   **2012 - 2014**
- Worked on a virtual training application for oil rig workers:
  - Implemented head-tracking and stereoscopy using 3rd party tools
  - Deployed the application on the <u>largest digital CAVE in Brazil</u>.

Lead Programmer   <u>Decatron</u>   **2012 - 2012**
- Worked on an online learning platform for bus transport professionals.

Senior Programmer   <u>OWSE</u>   **2011 - 2012**
- Worked on an online maritime logistics system in one of the busiest port terminals in Brazil.

Senior Programmer   <u>Message IT</u>   **2009 - 2011**
- Developed the company's application framework and many of the company's internal tools.

Programmer   <u>Message IT</u>   **2007 - 2009**
- Worked on an online billing system for Globosat, the biggest Pay-TV company in Brazil.

Programmer   <u>Petrobrás Social Security Foundation</u>   **2004 - 2006**
- Worked in the migration of company's loan system to the web.

EDUCATION

Graz, Austria   **Graz University of Technology**   **2014 - 2016**
Ph.D. in Computer Graphics (Not completed)

Rio de Janeiro, Brazil   **Pontifical Catholic University**   **2012 - 2013**
M.Sc. in Informatics, Major in Computer Graphics (GPA: 9,1)

Rio de Janeiro, Brazil   **Centro Universitário da Cidade**   **2008 - 2011**
B.Sc. in Computer Science (Merit scholarship)

AREAS OF EXPERTISE

Procedural generation, Graphics programming, Parallel/distributed programming, Engine programming,
C++, C#, Python, Java, Javascript, OpenGL, Direct3D, GLSL, HLSL, CUDA, GPGPU,
Software engineering, Test-driven development, People management