






# Bruno B. P. L. de Araujo

## Software Engineer

-  April 16th, 1986 (36 years old)
-  Rio de Janeiro, Brazil
-  Available on request
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## About me

I am motivated by challenging tasks and to teach others about what I have learned. My experience as both an academic researcher and as a systems analyst helps me to approach, to model, to understand problems, and to develop a solution. My analytical skills have been proven useful in detecting and preventing bugs and problems in systems modeling.

For internships, publications, presentations, games developed, and extra-curricular courses, check the website above.

## Skills

Programming: C, C++, C#, Lua  
Libraries: Boost, GTK, Qt  
Quality control: Boost Test, Google Test, valgrind, cppcheck  
Certifications: Certified Scrum Master, Certified Product Owner (Scrum Alliance)  
Languages: Portuguese (Native), English (Intermediate)  
Test results: Cambridge English FCE grade B2 (2003)

## Experience

- Feb 2022 - Present **Technical Lead** Instituto Tecgraf – PUC-Rio  
Tech lead in v3o2 project. Responsible for the teams' software architecture decisions, and representing the team. Programming in C++ 17.
- Jan 2020 - Jan 2022 **Systems Analyst** Instituto Tecgraf – PUC-Rio  
C++ developer in v3o2 project.
  - Programming in C++ 17 using Qt, GTK+, and boost.
  - Version control in git and CI/CD with gitlab.
  - Technical interviewer in the recruitment process.
  - Worked in a remote (work from home) environment, using VPN and ssh, coordinating using Jira and Slack.
- Feb 2018 - Jan 2020 **Product Owner** Instituto Tecgraf – PUC-Rio  
Scrum Product Owner in v3o2 project. Responsible for the product value of various parts of the software dealing with geology and geophysics. Responsibilities included: understand the client needs, propose a solution, create user stories for the development team, and manage client expectations.
  - Wrote and maintained the end-user product documentation for the parts I was responsible for.
  - Established the recruitment interview process.
  - Presented the product in client-held fairs.
  - Participated in industry and academic related fairs to attract new clients for the company.
- Aug 2011 - Feb 2018 **Systems Analyst/Researcher** Instituto Tecgraf – PUC-Rio  
C++ developer in v3o2 project, a seismic and well data visualizer for Petrobras running on Linux RedHat/CentOS 5 using OpenGL 2, boost, and other open source and proprietary libraries.
  - QA using GoogleTest framework, valgrind, and cppcheck.
  - Implemented interfaces using GTK+ and Qt.
  - Wrote tools in Lua to generate and transform data for testing.
  - Organized and wrote the documentation of the development environment setup for work from home.
  - Worked on the upgrade to RedHat/CentOS 6.
  - Presented with colleagues a 2 day workshop on Scrum.
- Apr 2009 - Aug 2011 **Researcher** ICAD/Visionlab – PUC-Rio  
Researcher in games, digital entertainment and simulations. C# programmer in a joint project with CENPES and USP. Developed a shade tree editor in C# and Windows GDI for building DirectX shaders for the proof tank visualizer project.
- Mar2009 - Dec2009 **Undergraduate Teaching Assistant** Department of Informatics – PUC-Rio  
Worked as UTA for Introduction to Programming (C language) and Data Structures. Gave extra classes at Saturdays and post-class hours, resolving exercises and exams.

## Education

- 2010-2012 **M.Sc. Computer Science** PUC-Rio  
Advisor: Bruno Feijó  
Dissertation title: A study on dynamic difficulty adaptivity for shoot'em up games  
Granted 2 years of CAPES scholarship  
GPA: 3.89 (4.0 scale)
- 2005-2009 **B.Sc. Computer Engineering** PUC-Rio  
Minor: Advanced studies in Mathematics  
Final project title: A shade tree editor for OGRE materials  
Granted 2 years of CNPQ scholarship