GUILHERME GONÇALVES

Computer Engineer

Nova Friburgo, Brazil



EXPERIENCE

Full-stack Developer & Software Engineer O2 Filmes

Sept 2018 - Present

Remote

- Developed a robust and online text editor and project manager dedicated to screenwriters.
- Developed its Back-end using Ruby on Rails and its Front-end using React.
- Implemented features such as multi-user tracking, data visualization, notifications, file upload, advanced graphical interface features, etc.

Scientific Researcher & Software Engineer CERN - European Organization for Nuclear Research

Mar 2019 - Mar 2020

♀ Geneva, Switzerland

- Designed and developed an energy estimation algorithm for the ATLAS Tile Calorimeter.
- The tool is based on machine learning techniques and was developed using C++ in a world-wide distributed system.
- Created a pulse generator used to simulate electronic readouts for data processing and physics analysis.

Full-stack Developer & Software Engineer DataHex Computer Technology

May 2016 - Jun 2018

Nova Friburgo, Brazil

- Developed and Designed an Event Ticket application for Android with data synchronization and Bluetooth printer.
- Developed and Designed a cloud-based Point of Sale system with business management features.
- Developed its Back-end using NodeJS and its Front-end using AngularJS following the micro-services approach.
- Developed a desktop application using Electron with data synchronization across the internet and among multiple local network nodes (using P2P).
- Developed an industry-standard authentication system implementing the OAuth 2.0 and OpenID Connect protocols.

Full-stack Developer & Mobile Developer Vista Group Network

♥ Nova Friburgo, Brazil

- Developed a cloud-managed parking software using Android devices for ticketing and infringement monitoring.
- Developed an iOS and Android application for parking tickets purchase using lonic and VB-Net.
- Created software to detect free parking spaces using image processing from surveillance cameras. The tool was developed using Python and Open-CV.

EDUCATION

Master degree in Computational Modelling Rio de Janeiro State University

max Jan 2018 - May 2020

Bachelor degree in Computer Engineering

Rio de Janeiro State University

Jan 2012 - Aug 2017

ACHIEVEMENTS



Cum Laude Honors - Rio de Janeiro State University

Academic honors awarded due to the high average grade.

STRENGTHS & SKILLS

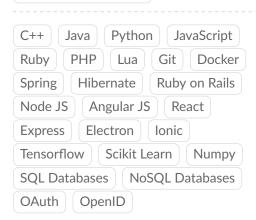
Full-stack Development

Mobile Development

Machine Learning

Image Processing | Cloud Computing

Software Engineering



LANGUAGES

Portuguese English French Spanish



COURSEWORK

- Signal Processing
- Neural Networks
- Statistical and Probabilistic Methods

PUBLICATIONS

Journal Articles

• Gonçalves, G.I. et al. (2020). "Performance Evaluation of Energy Reconstruction Methods in High Energy Physics Experiments". In: Revista Mundi Engenharia, Tecnologia e Gestão (ISSN: 2525-4782) 5.2.

Conference Proceedings

- Gonçalves, G.I., B.S.M. Peralva, L.M. Andrade Filho, et al. (2020).
 "Performance of Energy Estimation Algorithms for the Tile Calorimeter of the ATLAS Experiment." In: Anais do Congresso Brasileiro de Automática. Brazil.
- (2018). "Energy Estimation Based On Wiener-Hopf Filtering For The ATLAS Tile Calorimeter". In: Anais do XXI Encontro Nacional de Modelagem Computacional. Brazil.
- Gonçalves, G.I., B.S.M. Peralva, R.P. Marques, et al. (2017). "Classification Of The Masticatory Side Pattern Using Digital Image Processing". In: Anais do XX Encontro Nacional de Modelagem Computacional.
 Brazil.
- Gonçalves, G.I., W.R. Telles, et al. (2015). "Development Of An Application For Monitoring Real-Time Water Levels In The Bengalas River Based On Direct And Inverse Problems Technical". In: Anais do XVIII Encontro Nacional de Modelagem Computacional. Brazil.

REFEREES

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