Vinícius Aires Barros

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Resume

Undergraduate in Computer Science at Federal University of Tocantins (UFT) and master's degree on Distributed Systems and Concurrent Programming at University of São Paulo (USP). Professional certified in Google Cloud Platform and experienced with another's cloud service providers (On-premises, AWS and Azure). Currently, work at Instituto de Pesquisas Eldorado as a Pleno Software Analyst in Motorola's Experience & Inovations team. In 2015 was awarded the title of best team in the North of Brazil in the Brazilian Programming Marathon.

Keywords: Cloud Computing; Internet of Things; Big Data

Academic Qualifications

Universidade de São Paulo (ICMC USP)   **São Carlos**
MSc. Degree, Computer Science and Computational Mathematics   *2016 – 2019*

The research focused on the Internet of Things data aggregation, through a Service-oriented architecture (SOA) that performed the acquisition of heterogeneous and distributed sensor data. It supports many types of relational and non-relational databases. The method developed helps on the integration of different communication protocols (HTTP, MQTT, and CoAP), and makes a simplified procedure for data processing.

Universidade Federal do Tocantins   **Palmas**
BSc. Degree, Computer Science   *2012 – 2016*

Developed several skills eg., web, and mobile development. Coordinated volunteer work, such as Coding Dojo, Programming Marathon, and academic events. Participated in the Brazilian Programming Marathon (2015), and was recognized as the best team in the North of Brazil. Also, in the undergraduate thesis developed an Android application for the service order creation by the university community.

Awards

1. 1st Brazilian Programming Marathon North Region (2015)
2. 1st Brazilian Programming Marathon Regional Phase (2015)
3. 2nd Brazilian Programming Marathon Regional Phase (2013)

Technical Skills

- **Programming Languages**: Java, Javascript, Python and C/C++;
- **Database Systems**: SQL and NoSQL;
- **Developer Tools**: Spring Boot, Android SDK, NodeJS;
- **Cloud Providers**: Google Cloud Architect, Amazon Web Services (AWS) and Azure.

Professional Experiences

Instituto de Pesquisas Eldorado   **Campinas**
Software Analyst   *Oct 2018 – Present*

Research and Development (R&D) of cloud-based applications for Motorola company. Work as a Cloud Architect Data Engineer, helping the customer build scalable and fault tolerant architectures on Google Cloud Platform (GCP).

Universidade Federal do Tocantins   **Palmas**
Software Engineering Intern   *Nov 2015 – Jul 2016*

Developed a Java Web (JSF 2+, Primefaces and Hibernate) and Android App for service operation administration by the academic community.

Banco do Brasil   **Palmas**
Software Engineering Intern   *Apr 2014 – Apr 2015*

Developed several web tools to automate the bank internal operations. Launched a new intranet system in Java EE (JSF 2+ and Hibernate) with internal systems e.g., blog, gallery and dashboards.

Volunteer Work

Universidade de São Paulo   **São Carlos**
Teacher Assistant (PAE)   *Jan 2017 – Jul 2018*

Teacher Assistant of Distributed Systems class, helping the professor on the elaboration of class work. Performed some works with Big Data tools, e.g., Apache Hadoop, Spark, Kafka with Government Open Data (Politics, Health, and Education).

Universidade Federal do Tocantins   **Palmas**
Teacher Assistant (PIM)   *Feb 2013 – Jul 2013*

Teacher Assistant of Data Structure class, helping the professor on the elaboration of class work and solving the proposed tasks. Helped the students to teach some subjects, e.g., Linked List, Binary Tree, Balanced Tree, B-Tree and Sorting Algorithm.

Licenses & Certifications

- Google Cloud Professional Cloud Architect[1]
- Google Google Cloud Professional Data Engineer[2]
- Google Cloud Associate Cloud Engineer[3]

<https://bit.ly/30pGstS>
<https://bit.ly/35MrC1r>
<https://bit.ly/2Tlva8v>

Academic Publications

[1] Vinícius A Barros, Sérgio AB Junior, Sarita M Bruschi, Francisco J Monaco, and Júlio C Estrella. An iot multi-protocol strategy for the interoperability of distinct communication protocols applied to web of things. In *Proceedings of the 25th Brazillian Symposium on Multimedia and the Web*, pages 81–88, 2019.

[2] Vinícius Barros, Júlio Estrella, and Herik Magalhães Serra. Avaliação de desempenho do global sensor network (gsn) para o provisionamento de serviços em internet de coisas em ambientes de computação em névoa. In *10º Simposio Brasileiro de Computacao Ubiqua e Pervasiva (SBCUP 2018)*.

[3] Vinícius Barros, Luiz Henrique Nunes, Paulo Lopes de Souza, and Júlio Estrella. Paralelização do algoritmo fast non-dominated sorting para o ranqueamento de cidades de acordo com informações do clima. In *8a Escola Regional de Alto Desempenho de São Paulo (ERAD-SP 2017)*.

[4] Vinícius Aires Barros, Julio Cezar Estrella, Leonardo Beck Prates, and Sarita Mazzini Bruschi. An IoT-DaaS approach for the interoperability of heterogeneous sensor data sources. In *21st ACM International Conference on Modeling, Analysis and Simulation of Wireless and Mobile Systems (MSWiM'18)*.

[5] Leandro Y Mano, Vinícius A Barros, Luiz H Nunes, Luana O Sawada, Júlio C Estrella, and Jó Ueyama. Enlace: A combination of layer-based architecture and wireless communication for emotion monitoring in healthcare. *Mobile Information Systems*, 2019, 2019.