



Charles Ferreira



Education

- Ongoing PhD in Informatic Engineering, University of Coimbra – Portugal (2017 - Present)
- MSc in Computer Science, UFMG, 2011.
- Bachelor in Computer Science, UFMG, 2008.

Specialties

- Web Operations & Infrastructure
- Cloud Computing Infrastructure Security
- Software Development.
- Data Mining
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Qualifications

Programming

- Fluency on Java, C, Perl and Bash & Unix Tools
- Knowledge on C++, C# and Python
- Experience with Hadoop ecosystem and Pig
- Good Object-Oriented Programming also knowledge in Event-Driven programming

Web Operations

- +1-year experience with a large production environment administration (database, network, services, virtual servers, 3rd-Part Services, CDN, Load Balancer, etc.).
- Sharp and tenacious troubleshooting skills.
- Scalability analysis, development of capacity plans, configuration management, optimization of application server and database engines.
- Experience with Monitoring and Analysis tools as Nagios, Graphite, and Ganglia.

Experience with UNIX System Administration

- +3-year experience with medium-sized Linux-centered academic laboratory administration.
- Configuration and maintenance of common applications as Apache, Tom-Cat, MySQL, NFS, DHCP, NTP, SSH.

Publications

- ROBERTO, Wanderley dos Santos; CAMPOS, Tarcisio Passos Ribeiro de; **GONÇALVES, Charles Ferreira**. Avaliação de dose absorvida em implantes de sementes de 153Sm na próstata. Cadernos Técnicos da Escola de Veterinária (UFMG), 2003.
- **GONÇALVES, Charles Ferreira**; TOTTI, L. C.; DUARTE, D.; PEREIRA, Adriano Cesar Machado; MEIRA JR., W.. ROCK: Uma metodologia para a caracterização de serviços web multimídia baseada em hierarquia da informação. In: XVII Simpósio Brasileiro de Sistemas Multimídia e Web (WebMedia), 2011, Florianópolis, SC. Anais do XVII Simpósio Brasileiro de Sistemas Multimídia e Web (WebMedia), 2011. p. 174-181.
- **GONÇALVES, Charles Ferreira**; FLORES, Luis Felipe Duarte; VILELA, Matheus Silva; SANTOS FILHO, Walter dos; C. J. Machado; MEIRA, A.S. Silva. Avaliação de Técnicas Paralelas de Blocagem para a resolução de entidades e



deduplicação. In: Workshop em Algoritmos e Aplicações de Mineração de Dados, 2008, Campinas. Anais do WAAMD 2008, 2008. v. 2008. p. 55-64.

- **GONÇALVES, Charles Ferreira.** Um dispositivo gerador de nêutrons rápidos para experimentação. In: INAC - International Nuclear Atlantic Conference, 2005, Santos. INAC 2005, 2005.
- **GONÇALVES, Charles Ferreira.** Projeto e montagem de um irradiador de Cs - 137 de pequeno porte. In: INAC - International Nuclear Atlantic Conference, 2005, Santos. INAC 2005, 2005.
- **GONÇALVES, Charles Ferreira;** TOTTI, L. C.; DUARTE, D.; PEREIRA, Adriano Cesar Machado; MEIRA JR., W.. An Open Large Dataset Processing Framework for Statistical Analysis. In: Seventh Symposium on Statistical Challenges in Electronic Commerce Research (VII SCECR), 2011, Rio de Janeiro, RJ. Seventh Symposium on Statistical Challenges in Electronic Commerce Research (VII SCECR),, 2011. v. 1. p. 1-2.

Languages

- Advanced English
- Native Portuguese

Professional Experience

2015 – Present: MiningMath Associates

System Analyst

- Working with the software team to build the products and solutions for the mine planning software.

2014: Fundação Hemominas

System Analyst

- Worked on the analysis and design of Foundation's Data Warehouse (DW). The system had some technological challenges and offline legacy system integration, based on files (Clipper and dbfs) to online DW Oracle technology system.

2014: Faculdades FAMINAS BH

Professor

- Taught the disciplines *Programming Language and Techniques II* and *Systems Analysis and Design*. The first focuses on teaching the Java language, as well as concepts and best practices of software engineering, such as version control, unit and functional testing, design patterns and layered architectures. The second emphasizes the teaching of the concepts of software development processes, analysis activities and system design with UML modeling.

2010 – 2014: Sambatech Mobile Multimídia

Service Reliability Engineer

- Worked with the SRE team to ensure the services SLA. Acted on company back-end services as MySQL-cluster, virtualized environment, hardware infrastructure and the company platform itself to ensure availability and scalability. Others tasks include hotfix, code review, maintenance, on-call rotation and code quality evangelism with our developers.

2010 – 2010: Sambatech Mobile Multimídia

Java Analyst

- Developer leader in the new Analytics service, for the main company product, the online video platform Liquid. It was responsible for the most architectural decisions in the project. The system developed was composed by an offline log processor that used the DBMS to integrate with the platform and a front end service to retrieve filtered information to the end user. Developed in Java and MySQL.

2011 – 2012: Sambatech Mobile Multimídia

Junior Java Analyst

- Worked in company main product, the online video platform Liquid, as a Java developer. The technology used was Java, Spring and others tools to develop new functionalities to the rich media platform. Many web services was integrated to compose mashups that enriched the platform capabilities.



2008 – 2009: CEPESA Data Crawler

Freelancer

- Development of a web-crawler for the automotive lubricants site CEPESA. The crawler was designed to collect information from the hidden part of the site (deep-web) and integrate with the contractor system. The software was built in python and the integration was by MySQL database.

2008 – 2009: Uniqueness Rules for CAIXA

Consultant

- Consultant in Data Quality. Work with data de-duplication and entity resolution techniques to improve the data quality in the government social security and social healthcare databases, mainly Caixa Econômica Federal information. We also used Data Mining techniques and a distributed de-duplication framework developed at UFMG.

2007 – 2009: Laboraty E-SPEED/ UFMG

Lab Administrator

- System administrator and documentation maintainer from the distributed and parallel systems laboratory of DCC/UFMG. This lab was headed by the Wagner Meira Jr. Professor. The work consisted in administrative tasks for the laboratory environment and infrastructure as network, hardware, installation from the Linux/Unix clusters.

2007 – 2008: Codificar Sistemas Tecnológicos

Intern

- Internship in Web Development; development and maintenance of web sites and corporate portals. Technology used: Dot Net.

2006 – 2008: Tamanduá Project

Intern

- This was a Data Mining project aimed to detect fraud in government auctions. The job consisted in create a web crawler able to collect government auctions information available online in governmental portals. Using Java, Perl and UNIX tools was built a framework using ETL techniques able to collect, extract and store data to support the Data Mining research.

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