

IVO CALADO

PERSONAL INFORMATION

Born in Brazil, July 23, 1986

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SUMMARY

Experienced Professor of Computer Science with a demonstrated history of working in the higher education industry. Skilled in Python, Java, C/C++, Kernel Development, Distributed, Event-driven and Scalable Systems. Strong education professional with a Doctor of Philosophy (Ph.D.) focused in Computer Science; Electrical Engineering from Federal University of Campina Grande. Moreover, he participated of the development of several technological projects acting with several active roles such as Fullstack developer, Development leader, Project manager, DevOps engineer.

WORK EXPERIENCE

2016–Present **CENTER OF EXCELLENCE FOR SOCIAL TECHNOLOGIES (NEES) – BRAZIL**

*Software Engineer,
DevOps Engineer
and Researcher*

As a full member of the aforementioned laboratory I have participated in the development of differents projects acting as Software Engineer, DevOps Engineer and Researcher. As Software Engineer, I have participated, as team leader and fullstack developer, the development of various e-learning and legal Web solutions. Such solutions were built in a partnership between the NEES laboratory and the Brazilian Ministry of Education. The development of such solutions involved several techologies such as:

- Programming languages: PHP with Laravel, Java/Spring, Angular
- SQL and No-SQL Database: MySQL, PostgreSQL and Elastic Search
- Project Management Solutions: Redmine, GitLab and Trello
- Version Control System: Git

As DevOps Engineer, I'm responsible for manage (install, configure and monitor) several virtual machines that support the projects executed by the NEES Lab. The farm is composed of more than 20 VMs that includes both production and staging environments. I'm also responsible for dockerize applications aiming the deployment of a CI/CD cycle. Used tools and techologies:

- Programming Language: Bash script
- Technologies: Docker, Gitlab CI/CD cycle, Elastic Stack, Ansible, Jenkins, CircleCI and Xen VMs
- Databases: PostgreSQL and MySQL
- Environment: Linux
- Project Management Solutions: Redmine (use and configuration), GitLab (use and configuration) and Trello
- Version Control System: Git

Fininally, as researcher I have conduct studies on the field of Internet of Things and Enactive Systems. Specifically, I have participated of a consortium including several universities such as Federal University of Alagoas (UFAL), University of Campinas (Unicamp), The Open University (UK), and others to

investigate Socio- Enactive Systems. During this period, I was also responsible for organizing the two first editions of the Brazilian Workshop of Internet of Things on Education (WICE).

2010–Present FEDERAL INSTITUTE OF EDUCATION, SCIENCE AND TECHNOLOGY OF ALAGOAS – BRAZIL

*Professor and
Researcher*

Professor and researcher teaching several undergraduate courses related to Software development, Communication and Systems such as Web development, Computer Network, System Administration, OOP, Operating Systems, Computer Organization and Architecture and Kernel development.

2008–2011 EMBEDDED SYSTEMS AND PERVASIVE COMPUTING LABORATORY (EMBEDDEDLAB) – BRAZIL

*Software Engineer
and System
Engineer*

As a member of the aforementioned laboratory I participated in the development of different projects acting as Software Engineer and System Engineer in projects conducted in partnership between EmbeddedLab and several companies such as Ford, Nokia, Eletrobras (a major Brazilian energy company) and Positivo Informatics. As Software Engineer, I have participated, as team leader and fullstack developer, in the development of different mobile and embedded applications. During this period, I also contributed to the development of Linux Kernel by implementing different congestion control algorithms into the Datagram Congestion Control Protocol (DCCP) (RFC 4340). Specifically, I supervised the implementation of the TFRC-SP (RFC 5622) and personally implemented a Cubic congestion control algorithm as a new CCID for DCCP. Used tools and technologies:

- Programming Languages: Java (Java SE, Java ME and Java EE), Grails, Groovy, Python and C/C++
- Database: MySQL
- Environment: Linux and Symbian OS
- Project Management Solution: GForge
- Version Control System: SVN
- Additional experiences: Linux Kernel Development and Automotive communication standards (CAN and OBD-II networks)

As System Engineer, I supervised an experimental evaluation of Linux Systems distributions to be used in netbooks, smartphones and notebooks. We considered both functional (aka features) and non-functional parameters (scalability, performance, interoperability, adaptability and robustness among others).

- Programming Language: Shell script
- Benchmark tools to system evaluation
- Environment: Different Linux distributions
- Project Management Solution: GForge

FORMAL EDUCATION

2010-2015 Federal University of Campina Grande (UFCCG) – Brazil

*PhD in Electrical
Engineering*

Thesis: *Quality of Service for Wireless Mesh Networks Based on Opportunistic Routing and Network Coding*
Original title: *Qualidade de Serviço em Redes Mesh Sem Fio Baseada em Roteamento Oportunístico e Códigos de Rede*
Advisor: Prof. Angelo PERKUSICH
(http://scholar.google.com.br/citations?user=CtE_d9IAAAAJ&hl=en)
Grantee of: BRAZILIAN FEDERAL AGENCY FOR POST-GRADUATE EDUCATION (CAPES)

2008-2010 Federal University of Campina Grande (UFCCG) – Brazil

Master in
Computer Science

Dissertation: *A Transmission Infrastructure to Multimedia Content Delivery with Support to Stream Adaptation*
Original title: *Infraestrutura para Transmissão de Conteúdo Multimídia com Suporte à Adaptação de Fluxos*
Advisor: Prof. Angelo PERKUSICH and Prof. Hyggo ALMEIDA
Grantee of: BRAZILIAN FEDERAL AGENCY FOR POST-GRADUATE EDUCATION (CAPES)

Bachelor in
Computer Science

2004-2008 Federal University of Alagoas (UFAL) – Brazil
Final Technical Report: *An Approach for Semantic Web Services Automatic Discovery and Composition*
Original title: *Um Algoritmo para Descoberta de Semantic Web Services envolvendo Composição de Serviços*
Supervisor: Prof. Ig Bittencourt
(<http://scholar.google.com.br/citations?user=BSe3NMwAAAAJ&hl=en>)

ADDITIONAL TRAINING

Virtualization

2019 National Education and Research Network, Brazil
The course enables Systems Administrator in designing, installation and management of Virtualization Server Farms and Cloud Computing.
Certificate: <https://esr.rnp.br/certificados/cdc-sal-0028-19> (Access code: 06162402444).

Wireless
Technologies

2018 National Education and Research Network, Brazil
The course enables Network Administrators in designing, installation and management of Wireless Networks.
Certificate: <https://esr.rnp.br/certificados/cdc-jpa-0022-18> (Access code: 06162402444).

Information
Theory

2015 State University of Campinas, Unicamp, Brazil
The São Paulo Coding and Information School was a two week long school on coding and information theory which was held in Brazil in January 2015. Leading researchers in the area gave both introductory courses (during the first week) and advanced courses (in the second one).
Event URL: <http://www.ime.unicamp.br/spcodingschool/>
Certificate: <https://drive.google.com/open?id=0BwUH8n7F3jZ2UGpOZEczSE9KcUE>

IPv6

2015 National Education and Research Network, Brazil
The course enables WAN and LAN network administrators in support the deployment of the IPv6 protocol stack.
Certificate: <https://esr.rnp.br/certificados/cdc-jpa-0137-15.pdf> (Access code: 06162402444).

Advanced Routing

2011 National Education and Research Network, Brazil
The course enables WAN and LAN network administrators in support the deployment of the IPv6 protocol stack.
Certificate: <http://esr.rnp.br/certificados/cdc-jpa-0245-11.pdf> (Access code: 06162402444).

OTHER INFORMATION

Languages

PORTUGUESE · Mothertongue
ENGLISH · Professional Working

May 24, 2020