

## Resume

# Edwin Cordeiro

Siebenbürgener Str. 12 - 81377 Munich - Germany

☎ +49 172 708-7681

✉ edwin@scordeiro.net

🌐 <https://edwin.scordeiro.net>

🌐 [www.linkedin.com/in/edwinc](http://www.linkedin.com/in/edwinc)

Brazilian und Portuguese

## Summary

Performance Engineer capable of identifying key performance metrics needed to guarantee network performance and meet QoS expected by customers. PhD student specialized in Computer Networks. Technical Evangelist with experience in teaching and motivating the usage of the IPv6 Protocol, participating in Internet Engineering Task Force (IETF) to contribute with Internet Protocols development. Customer facing expert capable to interact on technical and non-technical levels with strong demand creation skills. Developer of value propositions to meet customer requirements. Love to work with multiple teams with different priorities, like Sales and Engineering.

## Experience

Since **Principal Performance Engineer**, *Akamai Technologies*, Munich, Germany.

June 2017 Performance evaluation and improvements for live and on demand media streaming. Analysis of network and product performance based on key performance metrics to increase QoS and prevent service disruptions to customers of the globally distributed media infrastructure networks that support 10+ Million simultaneous users in big events like the Olympics or the FIFA World Cup. Analyses are based on large datasets collected from production networks and explored by custom internal solutions or with the usage of open source solutions, like Hadoop, Grafana, and Postgres.

Interaction with multiple internal teams, like software development, product management and customer support, to enable early problem detection and fixes as well to mitigate ongoing detected and undetected issues. Training and mentoring of new team member.

May 2017 **Research Staff**, *Technical University Munich*, Munich, Germany.

Nov 2014 Researcher at the Chair for Network Architectures and Services as part of my PhD studies with a scholarship from the German Academic Exchange Service (DAAD). Research related to Routing Protocols, Network Quality of Service (QoS), Interface to the Routing System (I2RS), Network Congestion Detection and Avoidance.

Nov 2014 **Senior Project Analyst**, *NIC.br*, São Paulo, Brazil.

Jan 2012 IPv6 Evangelist at IPv6.br Project. Teacher at IPv6 courses for employees of Internet service and content providers. Worked in updating the didactic material, that became a published book. Research on IPv4 to IPv6 transition techniques and IPv6 Security, including lab tests (MAP-T, MAP-E, 464XLAT, NAT64) and contributions to IETF.

Viability analysis of Software Defined Networks (SDN) to increase the capabilities of the Brazilian Internet Exchange Points (IXP.br).

Sep 2011 **Field Application Engineer**, *Avnet*, São Paulo, Brazil.

Jan 2008 Enablement of customer projects with Field-programmable Gate Array (FPGA) devices by developing and offering of VHDL courses.

Development and execution of a plan to increase the Xilinx FPGA customer base into new market segments in Brazil.

Similar initiatives for other manufactures like Freescale, Silicon Labs, Broadcom, PMC-Sierra, Applied Micro, Marvell, Intel and Texas Instruments. Supporting processors like ARM (7, 9, Cortex M3 and Cortex A8) and x86, programming languages (C/C++) and operating systems (Linux, uCLinux and Windows Embedded).

Responsible for a heterogeneous group of customers, but particularly in Telecom and Industrial segments.

Edwin Cordeiro

Siebenbürgener Str. 12 - 81377 Munich - Germany • ☎ +49 172 708-7681 • ✉ edwin@scordeiro.net

- Nov 2007 **Field Application Engineer**, *PI Componentes*, São Paulo, Brazil.
- Nov 2006 Support existing and new customer projects.  
Used existing material to teach new technologies like FPGA, ARM processors, GPS and GSM/GPRS modules, operating systems (Linux, Windows CE, uCLinux) and programming languages (C/C++ and Java). Worked with products from Digi, Altera, uBlox etc.
- Oct 2006 **Trainee Software Developer**, *Innovatech Telecom*, Campinas, Brazil.
- May 2006 Development of a GSM Micro Base Station with GSM over VoIP. Responsible for the VoIP system that used ARM processors, uCLinux and C/C++. Worked with SIP and RTP protocols.  
Customization of the Linux kernel and device drivers to achieve high performance on a limited embedded system.
- Apr 2006 **Hardware Developer - Scientific Initiation**, *Brazil-IP Project*, Campinas, Brazil.
- Jan 2005 Development of MP3 ASIC chip up to the FPGA prototyping. Advised by Professor Guido Araújo - Instituto de Computação / UNICAMP. The FPGA prototype was presented in 2005 SBCCI Congress, Florianópolis, Brazil.

## Education

- 2021 (exp.) **Technical University Munich**, *Doctor of Engineering, Network Architectures and Services*, Munich, Germany.
- 2014 **Instituto de Pesquisas Tecnológicas**, *Master of Engineering, Computer Networks*, São Paulo, Brazil.
- 2006 **Universidade Estadual de Campinas**, *Bachelor of Engineering, Computer Engineering*, Campinas, Brazil.

## Publications

- 2015 **RFC 7703 – Experience from MAP-T Testing**, *IETF*, Author.  
Test results of a network that uses MAP-T dual translation technique. Overview of user applications' behavior with a shared IPv4 address.
- 2015 **Laboratório de IPv6**, *IPv6.br Project*, Coauthor.  
IPv6 teaching through the use of network emulators. It explains basic concepts, like Neighbor Discovery Protocol, application configuration, WEB servers and proxy, security considerations, firewall and DoS attacks, and IPv4 to IPv6 transition techniques.

## Languages

English: Bilingual proficiency (C2)  
German: Good knowledge (B2)

Portuguese: Native speaker  
Spanish: Good knowledge (B2)

## Skills & Knowledge

Technical Evangelist  
Computer Networks  
Logical Circuits and FPGA  
Programming Languages  
Key Performance Indicators

Value proposition and Demand Creation  
Processors and Microprocessors  
Embedded Systems  
Operating Systems  
Large Systems

## References

Available Upon Request

*Edwin S. Cordeiro*  
**Edwin Cordeiro**