

Karine Pires

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EDUCATION

Université Pierre et Marie Curie, Paris, France. 2012 – present

Telecom Bretagne, Rennes, France.

Ph.D. in Computer Science.

- Thesis title: Delivery, Transcoding and Neutrality on Large Live Streaming Systems. Advisors: Dr. Sébastien Monnet and Dr. Gwendal Simon.
- Orchestration of multiple machines and creation of tools (PHP, Python and R) to interact with Twitch and YouTube APIs, in order to retrieve live streaming systems snapshots.
- Development with CPLEX IBM (on Python and C++) to solve ILP of hybrid live stream delivery.
- Tutoring two students that developed a tool on Qt/C++ for DASH bandwidth estimation.
- Participation as volunteer on the organization of SBAC-PAD 2014 conference.
- Attended as participant at HTDC 2012, IMC 2013 (with student grant) and WOS3, and as speaker at COMPAS 2014, CNSM 2014 and ICPADS 2014.

Universidade Federal do Paraná, Curitiba, Brazil.

2009 – 2011

M.Sc. in Information Technology.

- Dissertation title: Connectivity Measures Based on Vertex Cuts Applied to Complex Networks (dissertation in Portuguese). Advisor: Dr. Elias P. Duarte Jr.
- Participation on evaluation experiments at secondary research topic entitled "An Efficient Strategy for Storing and Searching Binary Trees in WORM External Memory".
- Attended as participant to SBRC 2011 and as speaker at WTF 2011.

Universidade Federal do Paraná, Curitiba, Brazil.

2004 – 2007

B.Sc. in Computer Science.

- Dissertation title: A Hybrid TCP/UDP Audio Application and a New Protocol for POTS Streaming (dissertation in Portuguese). Advisor: Dr. Elias P. Duarte Jr.
- Participated as a member of a research group with scholarship.
- Volunteer alumnist at the yearly presentations for new students.

PROFESSIONAL EXPERIENCE

No Zebra Network Ltd., Curitiba, Brazil.

2007 – 2011

Development Manager.

- Managed two teams (design and development), their projects and technical interviews.
- Maintained and created large scale websites (millions views monthly) with PHP, RoR and MySQL.
- Deployed many optimizations such as caching strategies, Varnish and Apache server configuration.
- Administrated Linux servers with backups, monitoring tools with high availability requirements.

PET Computação UFPR, Curitiba, Brazil.

2004 – 2006

Member of PET Computação UFPR with scholarship.

- Instructed PHP/MySQL classes and elaborated the book for this teaching.
- Maintained group website and created internal tools as library system and courses administration.
- Actively participated to local, regional and national meetings as group representative.

PUBLICATIONS

- PIRES, K.; MONNET, S.; SENS, P. POPS: a popularity-aware live streaming service. ICPADS. 2014.
- PIRES, K.; SIMON, G. DASH in Twitch: Adaptive Bitrate Streaming in Live Game Streaming Platforms. VideoNext. 2014.
- MAILLÉ, P.; PIRES, K.; SIMON, G.; TUFFIN, B. How Neutral is a CDN? An Economic Approach. CNSM. 2014.
- LAURA, T.; APARICIO-PARDO, R.; PIRES, K.; SIMON, G.; BLANC, A.; FROSSARD, P. Optimal Selection of Adaptive Streaming Representations. TOMM. 2014.
- PIRES, K.; MONNET, S.; SENS, P. POPS : service de diffusion de flux vidéos live prenant en compte la popularité. COMPAS. 2014.
- PIRES, K.; SIMON, G. Book chapter entitled "Interactive Multimedia Applications on Clouds: Video services, games, others." (to be published).
- DUARTE JR., E. P.; PIRES, K.; TAVARES, R. A. E. An Efficient Strategy for Storing and Searching Binary Trees in WORM External Memory. J. Information Science (JIS) 36(6):751-762. 2010.
- PIRES, K.; COHEN, J.; DUARTE JR., E. P. Medidas de Conectividade Baseadas em Cortes de Vértices Para Redes Complexas. XII WTF. 2011.

SKILLS

Programming and Tools Python (expert), R (expert), PHP (expert) JavaScript (expert), HTML/CSS (expert), C++(proficient), RoR (prior experience), Java (prior experience), C (prior experience); GIT, SVN, Apache, MySQL, SQLite, Linux.

Languages English: fluent (speaking, reading, writing); French: intermediate (speaking, reading); basic (writing); Portuguese: native language.