Curriculum Vitae

Martín Varela Rico

Contact Information

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Personal Information

Date of birth: January 8th, 1978.
Place of birth: Montevideo, Uruguay.
Nationalities: Uruguayan, Finnish.

Education

10/2002–11/2005 PhD (Computer Science) at Université de Rennes 1, Rennes, France.

> Title: "*Pseudo–subjective Quality Assessment of Multimedia Streams and its Applications in Control*".

> Advisor: Prof. Gerardo Rubino.

> This work was financed by a French Government grant.

9/2001–7/2002 MSc (Computer Science - Networks and Systems) Université de Rennes 1, France.

> Title: "*Quality Assessment of a Multimedia Stream Transported Over the Internet*".

> Advisor: Prof. Gerardo Rubino.

4/1996-4/2001 Computing Engineering, Universidad de la República, Uruguay.

Work Experience

Since 4/2020 Senior SW Engineer at Profilence. I am in charge of the development of a new, stream processing based, back-end for Profilence's platform, in order to build a more flexible analytics platform. This new back-end is implemented in Clojure, and built around Kafka streams and a bi-temporal Datalog DB (XTDB). I also do some development in other back-end components, in C#.

03/2018-12/2019 Senior SW Engineer at callstats.io. I worked in the analytics team, where I develop our understanding of QoE for WebRTC services. My duties involve the design and development of the "Extended MOS" feature in callstats.io's product, as well as related features such as Root Cause Analysis, etc. This is an end-to-end process, from designing suitable quality models to implementing them in production (in Clojure and Java, in the context of a real-time stream processing pipeline).

02/2017−07/2017 Senior Systems Engineer at EXFO. I worked in the Network Function Virtualization (NFV) team, for Service Assurance. My role was to guide the design EXFO's SA solutions for NFV. In Spring 2017, EXFO decided to cease all NFV-related activities in Finland, and this work was cut short.

9/2013−02/2017 Principal Scientist at VTT. Network Performance team. At VTT I led the work on QoE research, both in scientific and commercial contexts, for over 10 years. This work involved both scientific research, and the development of prototypes and production-ready customer solutions.

9/2014−11/2014 Visiting Senior Research Fellow at the Cooperative Systems group, Faculty of Computer Science, University of Vienna.

6/2007−8/2013 Senior Scientist at VTT. Quality of Service Technologies team.

4/2009−12/2009 Founder and CTO at MOS4 Oy.

12/2005−5/2007 Ercim post−doctoral fellow. From 12/2005 to 9/2006 I worked at the Computer and Networks Architectures laboratory of the Swedish Institute of Computer Science (SICS). I then worked from 9/2006 until 5/2007 at VTT in Oulu, Finland, in the Quality of Service Technologies team.

11/2002−2/2005 Lab monitor at École National Supérior de Télécommunications de Bretagne (ENST Bretagne) for networking courses.

10/1999–10/2003 Teaching Assistant at the Computer Science Institute of the School of Engineering, Universidad de la República, Uruguay.

I have worked there on Computer Architecture and Operating Systems courses.

8/2000–5/2001 Systems Analyst at the Informatics Division of the Uruguayan Department of Justice (Poder Judicial, División Informática).

Duties included the specification of requirements and design of the institution's web portal and maintenance tools, and network design and security.

1/2000–5/2001 Consultant work, freelance programming, training courses on Object–Oriented programming and Java programming for enterprises.

12/1998–12/2000 Teaching Assistant / Lecturer at the Instituto Universitario Autónomo del Sur, Montevideo, Uruguay.

I have worked on Programming, Software Engineering, and Compilers courses, and also in summer labs.

4/1998–12/1999 Computing teacher at an elementary school (Colegio Bilingüe Ciudad Vieja), Montevideo, Uruguay.

3/1998–2/1999 English teacher at the Uruguayan Military High-school (Liceo Militar General Artigas), Montevideo, Uruguay.

SKILLS

I am familiar with a number of technologies, tools and programming languages. In my daily work, I use mostly Clojure, C#, Datalog, Kafka, Cassandra, git, Java, Julia, R, Bash/Zsh, sed/awk, Emacs lisp and LaTeX. Throughout my career I have also used other languages/technologies such as Ruby, Haskell, Python, C, C++, SQL, and gnuplot.

Besides my work on QoE and QoE management, I have done work on Unified Communications, QoS (measurement techniques, monitoring, model-based performance analysis), Software-defined Networking (SDN) and Network Function Virtualization (NVF).

I can work comfortably with the major OS environments (though I much prefer Mac OS and Linux).

LANGUAGES

Spanish – Mother tongue.

English – CEF C2 (CPE grade A – University of Cambridge)

French – Full working proficiency.

Finnish – CEF B2 (YKI intermediate level).

Portuguese – Can communicate.

Swedish – Basic notions.

PUBLICATIONS

I have an extensive publication record in the QoE domain, which can be found online
at https://martin.varela.fi/publication/