Benjamin Sarti

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Address: 88 Kailash Hills (2d floor), East of Kailash - 110065 New Delhi, India

Objective

French Electrical and General Engineer **holding a Working Holiday Visa for New Zealand** and looking for a full-time job in software development, telecommunications, automation, systems or test engineering.

Experience

Famoco New Delhi, India

IT Support Engineer

Jun. 2016 – Present

- Helping our clients to integrate their Android applications on NFC readers and to use our Mobile Device Management platform.
- Installed and tested applications to collect and analyze the bugs and to propose solutions.
- Developed Android applications to interact with Famoco devices (NFC, connectivity, notifications, ...) for technical support and presales.

CPQD Campinas, Brazil

R&D Engineer

Aug. 2014 – May 2016

- *Optical amplifiers:* automated measuring instruments and optical subsystems using LabVIEW and Matlab to characterize EDF and Raman amplifiers. Performed integration tests (hardware + firmware) using command-line user interfaces.
- *Integrated Tunable Laser Assembly:* built a laboratory setup for automated optical characterization using Python and C.
- *Packaging for integrated photonics:* automated DC motors and piezoelectric transducers using Python for free space alignment of polarization multiplexers.

Intern *Jul.* 2013 – Aug. 2014

Optical networks: implemented dynamic channels equalization algorithms in C++ on CPqD's testbed. Controlled a cascade of optical nodes using multithreading.

Institut Fresnel Marseille, France

Intern *Jun.* 2012 – *Jul.* 2012

Optimized the optical filtering of plasmonic structures using MATLAB.

Education

Universidade Estadual de Campinas

CAMPINAS, BRAZIL

Master of Electrical Engineering

Jul. 2014 – Dec. 2015

Nonlinear programming, Information theory, Optical links and Probability theory. *Dissertation title:* "Field Calibration Procedure for Enhanced Automatic Gain Control of Distributed Counter-Propagating Raman Amplifiers."

École Centrale Marseille

Marseille, France

Engineer's Degree (French Diplôme d'Ingénieur)

Sept. 2010 – Nov. 2014

Multidisciplinary formation in sciences (Mathematics, Physics); in engineering (Solid and Fluid Mechanics, Heat transfer, Chemistry, Electronics, ...) and in social sciences (Management, Economics, foreign languages,...).

Universidade Estadual de Campinas

Bachelor of Electrical Engineering

Campinas, Brazil Jul. 2012 – Jul. 2014

Telecommunications, Electronics, Control Engineering and Power Engineering. **Embedded systems:** • Programmed micro-controllers using Process Expert and Code Warrior. Controlled physical systems using GPIO pins and interruptions.

• Built an digital-to-analog converter using a R–2R ladder and a Raspberry Pi.

Skills

Programming Languages: Python, MATLAB, LabVIEW, Java, XML, C and C++.

Operating Systems: Linux, Windows and Android.

Others: OptiSystem, LaTeX, Git, Jira, TestLink, Zoho, MySQL, Confluence, EAGLE, Inventor.

Natural languages: Fluent in English, French and Portuguese. Intermediate in Spanish.

Publications

- J. Januario, M. G. Alabarce, **B. Sarti**, N. G. Gonzalez, and J. R. F. Oliveira, "Experimental demonstration of overshoot suppression for cascaded WSS-based ROADMs," in *Optical Fiber Communication Conference*, Los Angeles, Optical Society of America, pp. Tu3H-5., 2015.
- **B. Sarti**, M. G. Alabarce, Benoît C. M. Roulle, Israel J. G. Cassimiro, Uiara C. Moura, J. R. F. Oliveira and Max H. M. Costa, "Field calibration procedure for enhanced automatic gain control of distributed Raman amplifiers," in 2015 SBMO/IEEE MTT-S International Microwave and Optoelectronics Conference, Porto de Galinhas, 2015.
- Y. Fei, A. Fumagalli, M. G. Alabarce, **B. Sarti**, U. C. Moura, N. G. Gonzalez, and J. R. F. Oliveira, "Estimating EDFA output power with an efficient numerical modeling framework," in *International Conference on Communications*, London, IEEE, pp. 5222-5227, 2015.
- **B. Sarti**, J. R. F. Oliveira, M. G. Alabarce, Uiara C. Moura, "Processo de calibração em campo dos amplificadores Raman distribuídos contra-propagantes para operação no modo de controle automático de ganho," INPE Brazil, patent application number BR 10 2015 011437-0, filed on May 2015.

Other competences and interests

Tennis competitions: best French ranking: 15.

Music: 10 years of musical theory formation at Amnéville City music academy with validation of the 3 first cycles. Has been playing the trumpet for 7 years and was a member of several orchestras.

Others: fitness training, Japanese animations and board games.