Benjamin Sarti May 23rd, 1990

benjamin.sarti@gmail.com • Skype: benjaminsarti • +55 (19) 98273-1367 • Nationality: French Address: Rua Francisco Andreo Aledo, 209 Ap. 04, Barão Geraldo, 13084-710 Campinas - SP, Brazil

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* **from a** *Grande Ecole*) *Sept.* 2010 – *Nov.* 2014 Multidisciplinary formation in sciences, in engineering and in social sciences.

Universidade Estadual de Campinas

Campinas, Brazil

Bachelor of Electrical Engineering

Jul. 2012 - Jul. 2014

Telecommunications, Electronics, Control Engineering and Power Engineering.

Experience

CPQD

Campinas, Brazil

R&D Engineer

Aug. 2014 – May 2016

- Optical amplifiers: working in research and development (EDFAs and Raman amplifiers), laboratory automation for optical characterization and integration tests.
- Tunable lasers: built a laboratory setup for automated optical characterization.
- *Packaging for integrated photonics:* building a laboratory setup for automated free space alignment of polarization multiplexers.

Intern

Jul. 2013 – Aug. 2014

Optical networks: implemented dynamic equalization algorithms on CPqD's testbed.

Institut Fresnel

Marseille, France

Intern

Jun. 2012 – *Jul.* 2012

Optimized the optical filtering in the long-wavelength infrared by studying the influence of geometrical parameters and material properties of plasmonic structures on their spectral response.

Skills

Computer skills: • Programming Languages: Python, MATLAB, LabVIEW, C and C++

• Operating Systems: Windows and Linux • Others: OptiSystem, Large Natural languages: French (mother language), English (advanced: 870 points at TOEIC on March 2012), Portuguese (advanced) and Spanish (intermediate).

Publications and Patent application

- "Experimental demonstration of overshoot suppression for cascaded WSS-based ROADMs," in *Optical Fiber Communication Conference*, Optical Society of America, 2015.
- "Field calibration procedure for enhanced automatic gain control of distributed Raman amplifiers," in 2015 SBMO/IEEE MTT-S International Microwave and Optoelectronics Conference, IEEE, 2015.
- "Estimating EDFA output power with an efficient numerical modeling framework," in *International Conference on Communications*, IEEE, 2015.
- "Processo de Calibração em Campo dos Amplificadores Raman Distribuídos Contra-Propagantes para Operação no Modo de Controle Automático de Ganho," patent application, INPE, Brazil.