

## Curriculum formativo, didattico, scientifico e professionale del candidato

### Dichiarazione sostitutiva di certificazioni

(Art. 46, D.P.R. 28 dicembre 2000 n. 445)

### Dichiarazione sostitutiva dell'atto di notorietà

(da sottoscrivere davanti all'impiegato addetto o da presentare o spedire con la fotocopia di un documento di identità)

(Art. 47, D.P.R. 28 dicembre 2000 n. 445)

Estremi del bando di selezione	Bando N. 10\2023
Informazioni aggiornate al	26\03\2023
Nome e Cognome	Mohamad Taki

Si raccomanda di indicare con precisione tutti gli elementi valutabili ai sensi del bando di selezione (aggiungere o togliere righe secondo necessità).

#### Esperienza professionale

Periodo	Ente	Principali attività e responsabilità
01.02.2021- 28.02.2023	University of Cagliari	Researcher Fellow in Bioelectronics
05.10.2015- 31.08.2020	Lebanese International University	Researcher Fellow in robotics and sensing
15.04.2014- 31.08.2015	Infibra Technologies s.r.l.	Research and development of new generation of fiber optic sensors
30.04.2012- 01.05.2015	Scuola Superiore Sant'Anna	Postdoc position in optical fiber sensors

#### Istruzione, formazione (es. titoli di studio, certificazioni professionali/linguistiche/informatiche)

Data	Titolo / Principali tematiche	Ente
28.02.2013	PhD in innovative technologies of ICT and Robotics	Scuola Superiore Sant'Anna
18.04.2008	Master of science degree in electronic engineer	Università degli Studi di Cagliari
26.10.2006	Bachelor of science degree in electronic engineer	Università degli Studi di Cagliari
12.07.2004	Bachelor of science degree in computer science, Nets and Telecommunications engineering	Lebanese University (IUT-Saida)

#### Publicazioni / Convegni

Y. Muanenda, M. Taki, T. Nannipieri, A. Signorini, C. Oton, F. Zaidi, I. Toccafondo and F. Di Pasquale, "Advanced Coding Techniques for Long-Range Raman/BOTDA Distributed Strain and Temperature Measurements", Journal of Lightwave Technology, Vol. 34, Issue. 2, pp. 342-350, 2016.
M. Taki, Y. Muanenda, I. Toccafondo, A. Signorini, T. Nannipieri, and F. Di Pasquale, "Optimized Hybrid Raman/Fast-BOTDA Sensor for Temperature and Strain Measurements in Large Infrastructures", IEEE Sensors Journal, Vol. 14, NO. 12, December 2014. (Special issue)
Y. Muanenda, M. Taki and F. Di Pasquale, "Long-Range Accelerated BOTDA Sensor Using Adaptive Linear Prediction and Cyclic Coding", Optics Letters, vol. 39, pp.5411-5414, September
M. Taki, A. Signorini, Y. Muanenda, C. J. Oton, T. Nannipieri and F. Di Pasquale, "Hybrid Raman/BOTDA Fiber Optic Sensor for Temperature and Strain Measurements", IEEE Photonics Technologies, pp. 1-3, May 2014.
M. Taki, A. Signorini, C. Oton, J. T. Nannipieri, and F. Di Pasquale, " Hybrid Raman/BOTDA Distributed Optical Fiber Sensors based on Cyclic Pulse Coding ", Optics Letters, vol. 38, pp.4162- 4165, October 2013
M. Taki, Y. Muanenda, C. J. Oton, T. Nannipieri, A. Signorini, and F. Di Pasquale, " Cyclic Pulse Coding for Fast BOTDA Fiber Sensors ", Optics Letters, vol. 38, pp.2877-2880, August 2013.
M. Taki, M. A. Soto, G. Bolognini and F. Di Pasquale, "Study of Raman amplification in DPPBOTDA sensing employing Simplex coding for sub-meter scale spatial resolution over long fiber distances ", Measurement Science and Technology, vol. 24, July 2013.

M. Taki, F. zaidi, I. Toccafondo, T. Nannipieri, A. Signorini, S. Faralli and F. Di Pasquale, “ High performance hybrid Raman/FBG fiber optic sensor based on Simplex cyclic pulse coding ” Optics Letters, vol. 38, pp. 471-473, February 2013
F. Zaidi, T. Nannipieri, A. Signorini, M. Taki, V. Donzella and F. Di Pasquale, “ High performance time domain FBG dynamic interrogation technique based on cyclic pulse coding”, IEEE Photonics Technology Letters, vol. 25, pp. 460-463, February 2013.
M. Taki, T. Nannipieri, F. Zaidi, A. Signorini and F. Di Pasquale, “ Hybrid Optical Fiber Sensor for Simultaneous Dynamic FBG Interrogation and Distributed Static Strain/Temperature Measurements ”, IEEE Electronics Letters, Vol. 48, pp. 1548 - 1550, November 2012.
I. Toccafondo, M. Taki, A. Signorini, F. Zaidi, T. Nannipieri, S. Faralli and F. Di Pasquale, “Hybrid Raman/FBG Sensor for Distributed Temperature and Discrete Dynamic Strain Measurements”, Optics Letters, vol. 37, pp. 4434 - 4436, November 2012.
M. A. Soto, M. Taki, G. Bolognini and F. Di Pasquale, “ Simplex- Coded BOTDA sensor over 120 km SMF with 1 m spatial resolution assisted by optimized bidirectional Raman amplification ”, IEEE Photonics Technology Letters, vol. 24, pp. 1823 – 1826, October 2012
M. A. Soto, M. Taki, G. Bolognini and F. Di Pasquale “ Optimization of a DPP-BOTDA sensor with 25 cm spatial resolution over 60 km standard single-mode fiber using Simplex codes and optical pre-amplification ”, Optics Express, vol. 20, no. 7, pp. 6860-6869, 2012
M. Taki, A. Signorini, Y. Muanenda, T. Nannipieri and F. Di Pasquale, “Advanced coding techniques for long-range Raman/BOTDA distributed strain and temperature measurements”, OFC/NFOEC 2015, Los Angeles, CA, USA, March, 2015. (Invited speaker)
Y. Muanenda, M. Taki, and F. Di Pasquale, “Fast Brillouin Optical Time Domain Analysis Sensor based on Adaptive Linear Prediction and Cyclic Pulse Coding”, Symposium on Advanced Distributed Optical Fiber Sensor Systems (FW22), Frontiers in Optics, Orlando, Florida, USA, Oct. 2014
Y. Muanenda, M. Taki, I. Toccafondo, A. Signorini, T. Nannipieri, C. J. Oton and F. Di Pasquale, “Cyclic Pulse Coding for Hybrid Fast BOTDA/Raman Sensor”, The 23st International Conference on Optical Fiber Sensors 2014, Santander, Spain, 02-06 Jun 2014
M. Taki, A. Signorini, Y. Muanenda, C. J. Oton, T. Nannipieri and F. Di Pasquale, “Hybrid Raman/BOTDA Fiber Optic Sensor for Temperature and Strain Measurements”, 16° Convegno Nazionale delle Tecnologie Fotoniche, Naple, Italy, 12-14 May 2014. (Invited speaker)
A. Signorini, I. Toccafondo, F. Zaidi, M. Taki, T. Nannipieri and F. Di Pasquale, “ Hybrid Fiber Optic Sensors for Simultaneous Distributed and Dynamic Discrete Measurement ”, Symposium on Advanced Distributed Optical Fiber Sensor Systems (FW22), Frontiers in Optics, Orlando, Florida, USA, 6-10 October, 2013.
T. Nannipieri, M. Taki, F. Zaidi, A. Signorini, M. A. Soto, G. Bolognini and F. Di Pasquale, “ Hybrid BOTDA/FBG sensor for discrete dynamic and distributed static strain/temperature measurements ”, The 22st International Conference on Optical Fiber Sensors 2012, Beijing, China, 15-19 October 2012.
M. Taki, M. A. Soto, G. Bolognini and F. Di Pasquale, “ Raman- assisted DPP-BOTDA sensor employing Simplex coding with sub-meter scale spatial resolution over 93 km standard SMF ”, The 22st International Conference on Optical Fiber Sensors 2012, Beijing, China, 15-19 October 2012.
M. Taki, M. A. Soto, G. Bolognini and F. Di Pasquale, “ Long- range distributed strain and temperature sensor based on Brillouin optical time-domain analysis employing Raman amplification and simplex coding ”, 14° Convegno Nazionale delle Tecnologie Fotoniche, Florence, Italy, 15-17 May 2012. (Invited speaker)
M. A. Soto, M. Taki, G. Bolognini and F. Di Pasquale, “ Enhanced- performance BOTDA sensing through optimized pulse coding and low-RIN bidirectional Raman amplification ”, Optical Society of America (OSA), OFC/NFOEC 2012, Los Angeles, CA, USA, March 4-8, 2012
M. Taki, M. A. Soto, F. Di Pasquale, and G. Bolognini, “Long-Range BOTDA Sensing Using Optical Pulse Coding and Single Source Bi-directional Distributed Raman Amplification ”, IEEE Sensors Conference 2011, Limerick, Ireland, 28-31 October 2011
M. A. Soto, S. Faralli, M. Taki, G. Bolognini and F. Di Pasquale, ” BOTDA sensor with 2-m spatial resolution over 120km distance using bi-directional distributed Raman amplification ”, The 21st International Conference on Optical Fiber Sensors 2011, Ottawa, Canada, 15-19 May 2011.
M. Taki, M. A. Soto, S. Faralli, G. Bolognini and F. Di Pasquale, “ Study of long-range distributed sensors based on Brillouin optical time-domain analysis employing bi-directional Raman amplification ”, 13° Convegno Nazionale delle Tecnologie Fotoniche, Genova, Italy, 9- 11 May 2011.
M. Taki, M. A. Soto, G. Bolognini and F. Di Pasquale, “ Long-Range Distributed Strain and Temperature Sensing with 40-cm Spatial Resolution Based on DPP-BOTDA Employing Optical Pre-Amplification and Simplex Coding ”, Optical Society of America (OSA), OFC/NFOEC 2011, Los Angeles, CA, USA, March 6 -10, 2011.
E. Orgiu, M. Taki, B. Fraboni, S. Locci and A. Bonfiglio, “Investigation on different organic semiconductor/organic dielectric interfaces in pentacene-based thin-film transistors”, Mater. Res. Soc. Symp. Proceedings, Boston, USA, 26-30

November 2007.

### **Altre attività scientifiche**

European patent: Title: Method and apparatus for measuring a distributed physical value of an optical device under test.  
Authors: Tiziano Nannipieri, Alessandro Signorini, Mohamad Taki, Stefano Faralli and Fabrizio Di Pasquale

Main investigator of "MARO (Medical Assistant RObot) project" funded by CNRS, Lebanon

Funding member of INFIBRA TECHNOLOGIES Srl, Innovative Start-Up formed in April 2014 as a Spin-Off of Sant'Anna School for advanced studies, University of Pisa

### **Ulteriori informazioni pertinenti**

Fluent in English, Italian and Arabic.

Good communication skills and experienced in working within diverse communities.

Luogo e data

Monserrato 26\03\2023