euro*pass* Curriculum Vitae **Bilel Kanoun** 



# Bilel Kanoun



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Skype Bilel Kanoun

Sex Male | Date of birth 08/12/1992 | Nationality Tunisian

WORK EXPERIENCE

#### 04/2022-Actuality Research Engineer

Huawei Technologies R&D Center, Sophia Antipolis Campus (France)

#### **Post-doctoral Researcher** 09/2020-03/2022

Géoazur-lab / INRIA-SAM, Sophia Antipolis Campus (France)

Project: Extraction of the curvilinear structure networks in image data using an innovative deep learning approach: Application to fracture and fault network extraction from satellite data.

#### 06/2015-08/2015 **Engineering Internship**

SFM Télécom, Tunis (Tunisia)

Project: QoE.Performance Analysis

Develop an Android Smart-phone Application that enables to enhance the Quality of Experience (QoE) in five well-used platforms in our daily life that are: Facebook, twitter, YouTube, Gmail and Yahoo Mail

## **EDUCATION AND TRAINING**

**European PhD** 11/2016-04/2020

EQF level 8

Università Degli Studi Di Napoli Parthenope, Napoli (Italy)

Thesis: Application of local and non-local denoising techniques to the restoration of synthetic aperture radar and magnetic resonance imaging data.

09/2013-10/2016 **Engineering Diploma in Telecommunications**  EQF level 5

Higher School of Engineering of Tunisia, Tunis (Tunisia)

Thesis: Wind Vector Estimation Process Using Sentinel-1 SAR Imagery

09/2011-06/2013 **Undergraduate University Studies Diploma (DEUPC)**  EQF level 2

Preparatory School of Engineering Studies of Sfax (IPEIS), Sfax (Tunisia)

PERSONAL SKILLS

Mother tongue(s)

Arabic



### Other language(s)

French

Italian

Spanish

English

**UNDERSTANDING SPEAKING WRITING** Reading Listening Spoken interaction Spoken production C2 C2 C2 C2 C1 **Voltaire Certificate** B1 B1 R1 B1 R1 Α1 A2 A1 Α1 Α1 C1 C1 C1 C1 C1 **TOEIC Certificate** 

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user Common European Framework of Reference for Languages

### Organisational / managerial skills

- · Co-orgnizer of the 2014 Sup'Com annual Forum (Logistic Committee Chief).
- Co-orgnizer of the 2014 Cloud School Event.
- Co-orgnizer of Tunisia Hackfest Security Contest.

### Digital skills

- · good command of Office suite and Linux
- · good command of LaTex
- · good command of Deep Learning Frameworks: Keras, Tensorflow and PyTorch
- · good command of programming languages (Python, Matlab, C/C++, JAVA and Swift iOS)
- · good command of SAR Toolboxes (ENVI, QGIS, ArcGIS, NEST and SNAP)
- · good command of Medical Tollbxes (NBIA Data Retriever and Sante DICOM viewer)

# ADDITIONAL INFORMATION

# Memberships

· IEEE Member

# Certifications

- · iOS Foundation Program Attendance Certificate.
- 2020 M2GARSS Conference Attendance Certificate.
- 2018 YP Remote Sensing Conference Attendance Certificate.
- 2018 EUSAR Conference Attendance Certificate.
- IEEE EURASIP S3P-2017 Attendance Certificate.
- Hackfest Security Contest Organisation Certificate.
- Cloud School Conference Event Organisation Certificate.

# Honours and awards

· 2015 Entrepreneurship Challenge Contest Award.

## International Research Activities

- August 2019 December 2019: Visiting Scientist for abroad period related to the PhD Cycle at the Department of Electronic Engineering and Automatic (DIEA), in the Universidad de Las Palmas de Gran Canaria (ULPGC), Las Palmas, Spain.
- March 2016 July 2016: Visiting Student for Engineering Graduation Project at the Laboratoire des Sciences et Technologies de l'Information, de la Communication et de la Connaissance (Lab-STICC) in ENSTA Bretagne, Brest, France.

## Talks and Presentations

• December 13, 2019: "New Approaches to denoising MRI Data with efficient Non-Local Means Filter". The Talk was presented in the University of Las Palmas de Gran Canaria, Las Palmas, Spain to researchers and students.





## Paper Reviewing

- · IEEE Access Journal (2 papers)
- · Geoscience and Remote Sensing Letters (GRSL) Journal (2 papers)
- · EUSIPCO 2021 (3 papers)

## **Journal Papers**

- [J-3] Kanoun B., Ambroaino M., Baselice F., Ferraioli G., Pascazio V. and Gomez L.; "Anisotropic Weighted KS Non-Local Means Filter for Rician Noise Reduction in MRI.", in IEEE Access, vol. 8, pp. 184866-184884, 2020, doi: 10.1109/ACCESS.2020.3029297.
- [J-2] Ambroaino M., Kanoun B. and Baselice F.; "wKSR-NLM: an Ultrasound Despeckling Filter Based on Patch Ratio and Statistical Similarity." In IEEE Access, vol. 8, pp. 150773-150783, 2020, doi: 10.1109/ACCESS.2020.3014909.
- [J-1] Kanoun B., Ferraioli G., Pascazio V. and Schirinzi G.; "Fast GPU-Based Enhanced Wiener Filter for Despeckling SAR Data." Remote Sensing, June2019; 11(12)., doi: 10.3390/rs11121473

## **Conference Papers**

- [C-6] Kanoun B., Cherif M. A., Manighetti, I., Tarabalka Y. and Zerubia J.; "An Enhanced Deep Learning Approach for Tectonic Fault and Fracture Extraction Using Very High Resolution Optical Images", ICASSP 2022 The IEEE International Conference on Acoustic, Speech and Signal Processing, Singapore, Singapore, 22-27 May 2022.
- [C-5] Kanoun B., Ferraioli G. and Pascazio V.; "Assessment of GPU-Based Enhanced Wiener Filter on Very High Resolution Images", M2GARSS 2020: The 1st IEEE Mediterranean and Middle-East Geoscience and Remote Sensing Symposium, IEE, Tunis, Tunisia, March 9 11, 2020.
- [C-4] Aghababaee H., Kanoun B., Vitale S. and Ferraioli G.; "*The use of NL paradigm in SAR applications*", RTSI 2019; The 5th International Forum on Research and Technologies for Society and Industry, IEEE, Firenze, Italy, September 9-12, 2019, doi:10.1109/RTSI.2019.8895595
- [C-3] Ferraioli G., Kanoun B., Pascazio V. and Schirinzi G.; "SAR Image Restoration via a NLApproach Based on the KS Test." IGARSS 2018 2018 IEEE International Geoscience and Remote Sensing Symposium, Valencia, Spain; July 2018, doi:10.1109/IGARSS.2018.8517949
- [C-2] Kanoun, B. and Ferraioli, G.; "Wind Speed Estimation Enhancement Using SAR Despeckling From C-Band Sentinel-1 Images", Young Professionals Conference on Remote Sensing, Aachen Germany; 7-8 June, 2018.
- [C-1] Kanoun B., Ferraioli G., Pascazio V. and Schirinzi G.; "Fast Algorithm for Despeckling Sentinel-1 SAR Data". EUSAR 2018, Aachen Germany; June 2018, ISBN: 978-3-8007-4636-1