



# SouLaimane GUEDRIA

## Curriculum Vitae

*Ph.D. in Computer Science & Software Engineer*

### Education

- 2017-2020 **Ph.D. in Computer Science**, *Univ. Grenoble Alpes*, Grenoble.  
Thesis: A scalable and component-based deep learning parallelism platform: an application to convolutional neural networks for medical imaging segmentation.
- 2013 - 2016 **Software Engineer**, *INSAT, Carthage University*, Tunis, Engineer's degree.  
Specialization in information systems management
- 2011 - 2013 **Integrated Preparatory Cycle**, *INSAT, Carthage University*, Tunis.  
Mathematics, physics and computer science
- 2007 - 2011 **Baccalaureate**, *High school of Ksibet Mediouni*, Monastir, Computer Science.  
Honors

### Experience

- 2021–Present **Research Engineer/Post-doctoral Research Fellow** , *Floralis UGA Filiale*, Grenoble.  
Technology transfert of my Ph.D. thesis results in collaboration with Huawei Technologies
- 2020–2021 **Research Fellow**, *Laboratoire D'Informatique de Grenoble, AGEIS (Univ. Grenoble Alpes)*, Grenoble.  
Design and development of a deep-learning-based solution for rapid detection and diagnostic of Covid-19
- 2017–2020 **Ph.D Candidate**, *Laboratoire D'Informatique de Grenoble, AGEIS (Univ. Grenoble Alpes)*, Grenoble.  
Building an end-to-end scalable deep learning toolkit for medical imaging and development of a component-based software framework to automate convolutional neural network (CNN) parallelism. Conducting a thorough analysis of the generalizability of the CNN parallelism techniques to the imaging segmentation applications and proposing a guideline to scale up CNNs training process without accuracy loss.
- 2017 – 2019 **Graduate Teaching Assistant**, *IUT2, Univ. Grenoble Alpes*, Grenoble.  
I was teaching Linux, web development basics, algorithmics, c programming and providing end of study project tutoring.

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- Feb–Jul 2016 **Data scientist Intern**, *Thuasne*, Grenoble.
- Building a sentimental analysis system in order to detect and pull trends of a patient dedicated social network <http://www.des-ailes-pour-votre-sante.com/>
  - Developing of a text clustering application used in various tasks by the company's marketing department.
- 2011–2014 **Tennis Refree**, *International Tennis Federation (ITF)*.  
Level 1 ITF refree in a set of national and international tennis tournaments.
- Jul–Aug 2014 **Software Engineer Intern**, *Anypli*, Monastie, Tunisia.  
Design and development of a Windows Phone 8.1 food delivery application.

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## Awards

- 2019 Judges' Vote Award Winner of the EIT Health PhD Translational Fellowships 2019, University of Oxford, England, UK
- 2018 EIT Health Innovation Days 2018 Grenoble Bronze Winner, Grenoble, France
- 2011 Baccalaureate Excellence Award (Ranked 9th nationally), Tunisia

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## Skills

- Advanced Deep Learning, Software Engineering, Distributed Systems, Big Data
- Intermediate Medical Imaging, Text mining, Web and mobile development
- Basic Blockchains

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## Scientific Communications

- 2019 Automating CNN Parallelism with Components, (*2019 IEEE International Conference on Computational Science and Computational Intelligence (CSCI-ISHI) at: Las Vegas, Nevada, USA*)
- 2019 Auto-CNNp: a component-based framework for automating CNN parallelism, (*IEEE BigData 2019 PEASH Workshop at Los Angeles, CA, USA*)
- 2020 R2D2: A scalable deep learning toolkit for medical imaging segmentation, *Software: Practice and Experience*
- 2020 Variability and reproducibility in deep learning for medical image segmentation, *Scientific Reports - Nature Research (SREP)*

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## Languages

- Arabic **Mothertongue**
- French **Fluent**
- English **Fluent**

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## Interests

- Tennis
- Entrepreneurship
- Healthcare fundraising
- Animal shelter volunteer

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