# Hassan Ismail Fawaz, MSc

- ♦ https://scholar.google.com/citations?user=oUrGNaoAAAAJ

## **Employment History**

- 2017 2020 **PhD candidate.** IRIMAS, Université Haute Alsace, France.
- 2018 2019 ■ Lecturer. ENSISA, Université Haute Alsace, France.
- 2016 2017 ■ Internship. TICKET Lab, Université Antonine, Lebanon.
- 2016 − 2016 Freelance. Website development www.mradmcc.com.

## **Education**

- 2017 2020 **Ph.D. Machine Learning, Université Haute Alsace, France** *Temporal data analysis with surgical data science application.*
- 2016 2017 M.Sc. Computer Science, Université de Bourgogne, France Second Class Hounours. Databases & Artificial Intelligence.
- 2011 2017 M.Sc. Software Engineering, Université Antonine, Lebanon Fourth Class Honours. Software & Telecommunications Engineering.

## **Research Publications**

## **Journal Articles (accepted)**

- Ismail Fawaz, H., Forestier, G., Weber, J., Idoumghar, L., & Muller, P.-A. (2019a). Deep learning for time series classification: a review. *Data Mining and Knowledge Discovery*. Code is available on https://github.com/hfawaz/dl-4-tsc/.
- Forestier, G., Petitjean, F., Senin, P., Despinoy, F., Huaulmé, A., **Ismail Fawaz**, **H.**, ... Jannin, P. (2018). Surgical motion analysis using discriminative interpretable patterns. *Artificial Intelligence in Medicine*, *91*, 3–11.

### **Conference Proceedings**

- Ismail Fawaz, H., Forestier, G., Weber, J., Idoumghar, L., & Muller, P.-A. (2019b). Deep Neural Network Ensembles for Time Series Classification. In *IEEE International Joint Conference on Neural Networks*.
- Ismail Fawaz, H., Forestier, G., Weber, J., Idoumghar, L., & Muller, P.-A. (2019c). Adversarial Attacks on Deep Neural Networks for Time Series Classification. In *IEEE International Joint Conference on Neural Networks*.
- Ismail Fawaz, H., Forestier, G., Weber, J., Idoumghar, L., & Muller, P.-A. (2018a). Evaluating surgical skills from kinematic data using convolutional neural networks. In *Medical Image Computing and Computer Assisted Intervention*. (Oral selection rate 4%). Code is available on https://github.com/hfawaz/miccai18.
- Ismail Fawaz, H., Forestier, G., Weber, J., Idoumghar, L., & Muller, P.-A. (2018c). Transfer learning for time series classification. In *IEEE International Conference On Big Data*. Selection rate 18.9%. Code is available on https://github.com/hfawaz/bigdata18.

## Workshops

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**Ismail Fawaz**, H., Forestier, G., Weber, J., Idoumghar, L., & Muller, P.-A. (2018b). Data augmentation using synthetic data for time series classification with deep residual networks. Code is available on https://github.com/hfawaz/aaltd18.

## **Skills**

Languages ■ English (TOEIC-955), French (B2), German (B1) & Arabic.

Development Python, Java & Slurm Workload Manager.

Databases Mysql, Neo4J, Protégé & Elasticsearch.

Web Dev ☐ HTML, CSS, JavaScript, Apache Web Server & Tomcat Web Server.

Misc. ■ Academic research, teaching, Lagrange & publishing.

# **Miscellaneous Experience**

#### **Grants**

2018 Mésocentre of Strasbourg. 1.6 million GPU computing hours.

2017 NVIDIA Corporation GPU Grant. Quadro P6000.

**▼** Coursera Financial Aid. Deep learning speciality.

## Visiting researcher

2018 Wayne State University. Dr. Abhilash Pandya.

#### **Certifications**

2018 **Volunteering**. IEEE International conference on Big Data.

■ Participation. International Summer School on Deep Learning.

2017 Participation. Cisco CCNA 1, 2, 3 & 4.

2016 **Participation**. Lebanese Collegiate Programming Contest.

■ **Participation**. Advanced Programming & Algorithms Boot Camp.

2015 **Participation**. Lebanese Collegiate Programming Contest.

## **Awards**

2018 **IEEE International Conference on Big Data.** Student Travel Award.

2016 First place. Université Antonine Programming Competition.

2015 Second place. Université Antonine Programming Competition.

#### **Talks & presentations**

2019 **TsDays**. Apprentissage par transfert pour la classification de séries temporelles.

2018 French society of computer science. What to do with your PhD?

■ **GDR-MADICS**. Interpretable evaluation of surgical skills.

#### **Teaching**

2018 **Deep Learning.** M.Sc. students in Computer Science - 20 hours.

# **Miscellaneous Experience (continued)**

## **Conference committee**

- 2019 **ORASIS'19.** Journées francophones des jeunes chercheurs en vision par ordinateur.
  - $\blacksquare$  AE'19. The 14<sup>th</sup> Biennial International Conference on Artificial Evolution

## Reviewer

- **2019**  $\blacksquare$  **MICCAI'19.** the  $22^{nd}$  International Conference on Medical Image Computing and Computer Assisted Intervention
  - IEEE/CAA JAS. Journal of Automatica Sinica