Hassan Ismail Fawaz, MSc

hassan.ismail-fawaz@uha.fr
https://hfawaz.github.io www.linkedin.com/in/h-fawaz
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.
2017 – 2017 **Internship.** Data Services & Valorisation for Business, Orange Labs, France.
2016 – 2017 **Internship.** TICKET Lab, Université Antonine, Lebanon.
2016 – 2016 **Freelance.** Website development - www.mradmcc.com.
2015 – 2015 **Internship.** Web application development, Dar El Handasah, Lebanon.

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)

1. **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/.
2. 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

1. **Ismail Fawaz, H.**, Forestier, G., Weber, J., Petitjean, F., Idoumghar, L., & Muller, P.-A. (2019). Automatic alignment of surgical videos using kinematic data. In *Artificial Intelligence in Medicine*. Acceptance rate is **21%**. Code is available on https://github.com/hfawaz/aime19.
2. **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*. Code is available on https://github.com/hfawaz/ijcnn19ensemble.
3. **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*. Code is available on https://github.com/hfawaz/ijcnn19attacks.

4. **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.

5. **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

1. **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, LaTeX typesetting & 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.

Miscellaneous Experience (continued)

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

2019 **Web programming**. Engineering students in Computer Science - 24 hours.

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

Conference committee

2019 **ORASIS**. Journées francophones des jeunes chercheurs en vision par ordinateur.

AE. Biennial International Conference on Artificial Evolution.

Workshop committee

2019 **AALTD**. ECML/PKDD Workshop on Advanced Analytics & Learning on Temporal Data.

Reviewer

2019 **IEEE TKDE**. IEEE Transactions of Knowledge and Data Engineering.

IEEE JBHI. Journal of Biomedical and Health Informatics.

MICCAI. International Conference on Medical Image Computing and Computer Assisted Intervention.

IEEE/CAA JAS. Journal of Automatica Sinica.