

# Ozan Caglayan

## Education

- 2014– **PhD**, *Team Language and Speech Technology - Le Mans University, France.*  
Topic: Multimodal Neural Machine Translation
- 2011–2014 **MSc. Computer Engineering**, *Galatasaray University, Istanbul/Turkey, GPA 3.93/4.0.*  
Topic: A Portable and Embedded SSVEP BCI system: emBCI
- 2004–2008 **BSc. Computer Engineering**, *Galatasaray University, Istanbul/Turkey, GPA 3.2/4.0.*  
2007 **Erasmus Exchange**, *Université Joseph Fourier, Grenoble/France.*
- 1996–2004 **High School**, *Lycée Saint-Joseph, Istanbul/Turkey, GPA 4.4/5.0.*

## Professional Experience

- 2017– **Engineer**, *M2CR Project - Le Mans University, France.*
  - 2012–2017 **Teaching Assistant**, *Galatasaray University, Turkey.*  
Teaching assistant for *Algorithms and C Programming, Operating Systems, Microprocessors.*
  - 2007–2012 **Software Developer**, *Scientific & Technological Research Council of Turkey (TUBITAK).*  
**Department:** Pardus Linux distribution
  - Summer 2007 **Intern**, *Scientific & Technological Research Council of Turkey (TUBITAK).*  
**Department:** Pardus Linux distribution
  - Summer 2006 **Intern**, *Scientific & Technological Research Council of Turkey (TUBITAK).*  
**Department:** Optoelectronics Laboratory
- ### Google Summer of Code Internships
- Summer 2013 **QEMU Project**, *Mentor: Michael D. Roth (IBM).*  
Integration of copy/paste ability between QEMU supervisor and guests.
  - Summer 2012 **Linux Foundation**, *Mentor: Luis R. Rodriguez (Qualcomm).*  
Development of Linux Kernel compat layer for building latest graphics drivers on old kernels.

## Research Interests

Deep Neural Networks, Neural Machine Translation, Image Captioning, Multimodality, EEG-based Brain-computer Interfaces, Signal Processing.

## Computer Skills

C, C++, Python, NumPy, Theano, Keras, Matlab/Octave, Arduino & Processing.

## Spoken Languages

Turkish (native), French (fluent), English (fluent)

## Publications

- 2017 Caglayan, O.; García-Martínez, M. Bardet, A.; Aransa, W.; Bougares, F.; and Barrault, L. *NMTPY: A Flexible Toolkit for Advanced Neural Machine Translation Systems*, In Prague Bull. Math. Linguistics, 109: 15–28. 2017.

- 2017 García-Martínez, M.; Caglayan, O.; Aransa, W.; Bardet, A.; Bougares, F.; and Barrault, L. *LIUM Machine Translation Systems for WMT17 News Translation Task*, In Proceedings of the Second Conference on Machine Translation, Volume 2: Shared Task Papers, Copenhagen, Denmark, September 2017. Association for Computational Linguistics .
- 2017 Caglayan, O.; Aransa, W.; Bardet, A.; García-Martínez, M.; Bougares, F.; Barrault, L.; Masana, M.; Herranz, L.; and van de Weijer, J. *LIUM-CVC Submissions for WMT17 Multimodal Translation Task*, In Proceedings of the Second Conference on Machine Translation, Volume 2: Shared Task Papers, Copenhagen, Denmark, September 2017. Association for Computational Linguistics.
- 2017 Rougier, N.P et al. (2017) *Sustainable computational science: the ReScience initiative*, PeerJ Computer Science 3:e142.
- 2016 Caglayan, O.; Barrault, L.; and Bougares, F. *Multimodal Attention for Neural Machine Translation*, arXiv preprint arXiv:1609.03976.
- 2016 Caglayan, O.; Aransa, W.; Wang, Y.; Masana, M.; García-Martínez, M.; Bougares, F.; Barrault, L.; and van de Weijer, J. *Does Multimodality Help Human and Machine for Translation and Image Captioning?*, In Proceedings of the First Conference on Machine Translation, Berlin, Germany, August 2016. Association for Computational Linguistics.
- 2013 Caglayan, O.; and Arslan, R. B. *Humanoid Robot Control with SSVEP on Embedded System*, In Proceedings of the Fifth International Brain-Computer Interface Meeting, California/USA.
- 2013 Caglayan, O.; and Arslan, R. B. *Robotic Arm Control With Brain Computer Interface Using P300 and SSVEP*, IASTED International Conference Biomedical Engineering (BioMed 2013), Innsbruck/Austria.
- 2012 Caglayan, O.; and Arslan, R. B. *P300 based Auditory Visual Brain Computer Interface*, IEEE 20th Signal Processing and Communications Applications Conference (SIU), Turkey.

## Workshops Attended

- 09/2017 EMNLP 2017, Copenhagen/Denmark
- 12/2016 Neural Information Processing Systems (NIPS), Barcelona/Spain
- 10/2016 Mathematical Foundations of Artificial Intelligence, Nesin Matematik Koyu, Sirince/Turkey
- 10/2015 Deep Learning for Machine Translation Winterschool, Dublin/Ireland
- 08/2015 DTU Deep Learning Summer School, Copenhagen/Denmark
- 02/2014 Berlin BCI Winterschool on Neurotechnology, Berlin/Germany
- 07/2012 International Summer School and Workshop on Brain Dynamics, Turunc/Turkey
- 05/2012 State-of-the-art in Signal and Image Processing, Nesin Matematik Koyu, Sirince/Turkey

## Software Projects

- Python Neural Machine Translation in PyTorch (nmtpytorch)  
[github.com/lium-1st/nmtpytorch](https://github.com/lium-1st/nmtpytorch)
- Python Neural Machine Translation in Theano (nmtpy)  
[github.com/lium-1st/nmtpy](https://github.com/lium-1st/nmtpy)
- C/C++ Continuous Space Language and Translation Modeling Toolkit  
[github.com/hschwenk/cs1m-toolkit](https://github.com/hschwenk/cs1m-toolkit)
- Python Emotiv EEG Data Acquisition Library  
[github.com/ozancaglayan/python-emotiv](https://github.com/ozancaglayan/python-emotiv)