Mohamed
F. Issa

DATE OF BIRTH:
01/03/1986

CONTACT

Nationality: Egyptian

📍 Egytem st 10, Faculty of Information Technology, room 404, null
8200 Veszprem, Hungary

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Other: mfibmm@gmail.com

WORK EXPERIENCE

01/01/2021 – CURRENT – Veszprem, Hungary

Postdoctoral Studies, Involved Member in Brain Bioelectrical Imaging Research Laboratory

Faculty of Information Technology, Pannonia University, , 8200, Hungary

https://mik.uni-pannon.hu/index.php/hu/k-f-i/kutatolaboratoriumok/agyi-bioelektromos-kepalkoto-kutatolaboratorium.html?fbclid=IwAR0xD6UcGOIVpvQC4J_jfSZaVC0C2xMmC2RsNKLowgsZn9iglcbt7xbhUoM

01/01/2020 – CURRENT

Research Cooperation

UCD School of Mechanical and Materials Engineering

Cooperation with the Cognitive Neural Systems Lab, the School of Electrical and Electronic Engineering, University College Dublin.

University College Dublin, Belfield, Dublin 4, Ireland, Dublin, Ireland

15/05/2018 – 30/06/2019 – Veszprem, Hungary

Researcher in a project "EFOP-3.6.1-16-2016-00015"

Faculty of Information Technology, Pannonia University, , 8200, Hungary

Electrical Engineering and Information Systems Dept., Faculty of Information Technology, Pannonia U, Hungary

12/08/2015 – 17/09/2016 – Benha, Egypt

Assistant lecturer

Faculty of Computers and Informatics, Benha University

Teaching
Supervising students during the graduation year.

Benha, Egypt

17/05/2008 – 11/08/2015 – Benha, Egypt

Demonstrator

Faculty of Computers and Informatics, Benha University

Benha, Egypt

EDUCATION AND TRAINING

01/09/2016 – 11/12/2020 – Egytem st 10,, Veszprem, Hungary

PhD (Computer Science)

Faculty of Information Technology, Pannonia University

2015 – 2016 – Benha, Egypt

Preliminary PhD (Scientific Computing)

Faculty of Computers and Informatics

2011 – 2015 – Benha, Egypt

M.Sc. of Science (Mathematics)

Faculty of Science

2010 – 2011 – Benha, Egypt

Preliminary M.Sc.
Faculty of Science

2003 – 2007 – Benha, Egypt

Bachelor of Science (Mathematics)
Faculty of Science

LANGUAGE SKILLS

OTHER LANGUAGE(S):

English

Listening	Reading	Spoken production	Spoken interaction	Writing
C1	C2	C2	C2	C2

PUBLICATIONS

Publications

1. **Issa, Mohamed F.**, G. Kozmann, and Z.Juhasz. "Increasing the Temporal Resolution of Dynamic Functional Connectivity with Ensemble Empirical Mode Decomposition." Springer, Cham, 2020.
2. **Mohamed F. Issa**, G. Tuboly, G. Kozmann, Zoltan Juhasz Automatic ECG artifact removal from EEG, Measurement Science Review, 2019.
3. **Mohamed F. Issa,** Z. Juhasz, Improved EOG Artifact Removal using Wavelet Enhanced Independent, Brain Sciences, 2019.
4. **M.F. Issa**, Z. Juhasz, Gy. Kozmann, Automatic Removal of EOG artefacts from EEG based on Independent Component Analysis, (PCIT 2019), 31 May – 1 June, Veszprem, Hungary
5. **Mohamed F. Issa,** G. Kozmann, Z. Nagy, Z. Juhasz, Functional Connectivity Biomarkers based on Resting-state EEG for Stroke Recovery, Measurement 2019, 12th Conference, May 27-29, Smolenice, Slovakia.
6. Z. Juhasz and **M.F. Issa**, EEG based imaging of stroke location, extent and progress of recovery using a GPU architecture, MIPRO 2019, 42th (MIPRO), Opatija, Croatia, May, 20-24, 2019.
7. Juhász Z., **Issa, M**. Kozmann Gy, Nagy Z., Stroke betegek EEG alapú nyugalmi funkcionális konnektivitásának vizsgálata, IME - XIV. IME Képalkotó Diagnosztikai Továbbképzés és Konferencia, 2019. március 21., Budapest.
8. Z. Juhász, **Mohamed F. Issa**, J. Körmendi, Ádám Gyulai, Zoltán Nagy, Quantitative
9. EEG in stroke rehabilitation, 6th Neuroimaging Workshop, 19-20 Oct 2018, Pecs, Hungary.
10. J.Navracsics, G. Sáry, Z.Juhász and **Mohamed F. Issa**, EEG correlates of L1 and L2 recognition, 20th Summer School of Psycholinguistics, June 10 – 14, 2018, Balatonalmadi, Hungary.
11. **Mohamed F. Issa**, J. Zoltán, K. György, Agyi konnektivitási módszerek alkalmazása motoros és kognitív feladatok vizsgálatában, IME XIII. Konferencia, Budapest, 2018. március 22.
12. **Mohamed F. Issa**, Z. Juhasz and G. Kozmann, EEG analysis methods in neurolinguistics: a short review, IME: Informatika és Menedzsment az Egészségügyben XVII : 2 pp. 48-54, (2018).
13. N. Judit, Juhász Z., **Issa F. Mohamed**, Sáry Gyula, Kétnyelvűek vizuális szófelismerésének EEG korrelátumai, Tudomány Napja nemzetközi konferencia, 2017. november 3-4.
14. **M.F. Issa**, F. Csizmadia, Z. Juhasz, Gy. Kozmann, "EEG-Assisted Reaction Time Measurement Method for Bilingual Lexical Access Study Experiments", 2017,11th, Smolenice, Slovakia, May 29 - 31, 2017.
15. J. Navracsics, Gyula Sáry, Z. Juhász, **Mohamed F. Issa**, EEG correlates of a bilingual language decision test, 19th School of Psycholinguistics, May 21 – 25, 2017,Balatonalmadi, Hungary.
16. N. Judit, J. Zoltán, **Mohamed F. Issa** és Sáry Gyula, Kétnyelvűek vizuális szófelismerése és annak EEG korrelátumai, IME XV. 2017. május 18., Budapest.
17. **Mohamed F. Issa** and S., Howida "Brain-EEG Signal Classification Based on Data Normalization for Controlling a Robotic Arm." Journal of Tomography & Simulation™Issue No. 1, Vo. 29, 72-85, 2016.
18. S. Howida, **Mohamed F. Issa**, and Salah M. El-Sayed. "Brain EEG signal processing for controlling a robotic arm",(ICCES), IEEE, 2013.
19. https://www.amazon.co.uk/Brain-Machine-Interface-Mohamed-Issa/dp/3659906611.

CONFERENCES AND SEMINARS

- **Conferences**

  1. **Issa, Mohamed F.**, G. Kozmann, and Z.Juhasz. "Increasing the Temporal Resolution of Dynamic Functional Connectivity with Ensemble Empirical Mode Decomposition." Springer, Cham, November 29 – December 3, 2020 Portorož, Slovenia,
  2. Z. Juhasz and **M.F. Issa,** EEG based imaging of stroke location, extent and progress of recovery using a GPU architecture, MIPRO 2019 - 42nd International Convention, DC - Distributed Computing in Data Science and Biomedical Engineering, Croatia.
  3. **Mohamed F. Issa,** Gyorgy Kozmann, Zoltan Nagy, Zoltan Juhasz, Automatic Removal of EOG artefacts from EEG based on Independent Component Analysis, PCIT2019, Veszprem
  4. **M. F. Issa**, A. Gyulai, Gy. Kozmann, Z. Nagy, Z. Juhasz, "Functional Connectivity Biomarkers based on Resting-state EEG for Stroke Recovery", 12th International Conference on Measurement, MEASUREMENT 2019, Slovakia.
  5. **M.F. Issa,** Z. Juhasz, Gy. Kozmann 13th Imaging Diagnostic Training Conference, 22th march 2018, Hotel Hungária City Center 1074 Budapest, Rákóczi út 90.
  6. Judit Navracsics, Zoltán Juhász, **Issa F. Mohamed**, Gyula Sáry, EEG Correlates of Visual Speech Recognition of Bilinguals, International Conference, Hungarian and Applied Linguistics Institute, November 6-7, 2017,Veszpreme ,Hungary.
  7. **M.F. Issa,** F. Csizmadia, Z. Juhasz, Gy. Kozmann, "EEG-Assisted Reaction Time Measurement Method for Bilingual Lexical Access Study Experiments", Proc. Measurement 2017, 11th International Conference on Measurement, , May 29 - 31, 2017. Smolenice, Slovakia.
  8. Judit Navracsics, Gy Hotel Hungária City Center 1074 Budapest, Rákóczi út 90.ula Sáry, Zoltán Juhász, **Mohamed F. Issa**, EEG correlates of a bilingual language decision test, 19th Summer School of Psycholinguistics, May 21 – 25, 2017, Balatonalmadi, Hungary.
  9. Shedeed, Howida, **Mohamed F. Issa**, and Salah M. El-Sayed. "Brain EEG signal processing for controlling a robotic arm"Computer Engineering & Systems (ICCES) 2013 8th International Conference on. IEEE, 2013, Cairo, Egypt.
  10. 6th Scientific Workshop, April 26-27, 2017, Embassy of of Egypt, Reichsratsstraße 11/1, A-1010 Vienna.
  11. 1 st Conference, "The Role of Applied Science in development and community service" 2015. Cairo, Egypt.

RESEARCH OF INTERESTS

- **Research of Interests**

  Biomedical informatics

  EEG signal processing

  Brain Connectivity

  Brain Computer Interface.

RESEARCH

RESEARCH

The research part includes developing novel methods of EEG Artifacts remove as ECG and EOG signals. A trigger hardware which provides an event timestamps of the experiment stimulus and response to the EEG apparatus during a bilingual lexical access task. Mapping topographic brain network and the neural connectivity between the cortical regions during resting state and event related potential (ERP). Increasing the temporal resolution of dynamic functional connectivity to generate a sharper time-frequency resolution and track the fast-dynamic brain connectivity changes. Introducing a high-resolution EEG technology besides the MRI as an aid for monitoring and quantifying stroke patient recovery progress, complementing the use of clinical stroke scales. Identifying reliable biomarkers that characterize progress of stroke recovery and predict outcome.

ATTENDED EVENTS

Attended Events

1. "Physiological and Bioinspired Systems Development at Obuda University: Research Activities in Budapest, a Reach Across Related Fields for the IEEE Systems, Man, and Cybernetics Society", Brain-Computer Interface Workshop hosted by Óbuda University May 9th, 2019, Budapest, Hungary.
2. 6th Scientific Workshop, Current Research, April 26-27, 2017, Embassy of Egypt in Vienna, Reichsratsstraße 11/1, A-1010 Vienna, Austria.
3. EEG correlates of a bilingual language decision test, 19th Summer School of Psycholinguistics, May 21 – 25, 2017, Balatonalmadi, Hungary.
4. Participation on Generali RUN Balatonfüred,31 October, 2020, Hungary, https://futofoto.hu/esemeny/GRB-2020/10676/esemeny/48/1?fbclid=IwAR1aN6qVy-JpJ-ONG4DKMgZCuHXvOBZ89dpPfRgeYqTexXhkb7O_UEdHb2Q
5. Participation in the event of attracting foreign students at Pannonia University in Hungary https://www.facebook.com/UniPannon/posts/5036117203127810

WORKING IN PROJECT

Working in project

EFOP-3.6.1-16-2016-00015, 2017: 2020

AWARD

Award

Young Investigator Award, Slovakian conference, Slovakia, 2017

BOOKS

Books

https://www.amazon.co.uk/Brain-Machine-Interface-Mohamed-Issa/dp/3659906611

VISITED PLACES

Visited Places

1. van gogh museum, 2019, Amsterdam, Netherlands.
2. European parliament, NATO, 2019, Brussels Belgium
3. The Louvre Museum, 2019, Paris, France.
4. The Colosseum, The Vatican Museums, 2018, Rome, Italy.
5. Reichstag's building, Berlin wall,4- 2017 Berlin, Germany.
6. National park in Croatia, 10-2017, Croatia.
7. Smolenice Castle, 5-2017, Smolenice, Slovakia.
8. The Hofburg , The Kunsthistorisches Museum, 2017, Vienna.
9. Buda Castle, Hungarian Parliament Building, 2016, Hungary.

LECTURES

Lectures

https://mik.uni-pannon.hu/index.php/en/the-faculty/news/112-faculty-news/2351-lecture-about-the-egyptian-history-in-english.html?fbclid=IwAR04qxjPFGGPEa8qY_-xnaGN-L3E7SryluONvv1BChjI0HTY2k-SMIrVqwU

PHD DEFENSE

11/12/2020

PhD discussion

https://mik.uni-pannon.hu/index.php/en/the-faculty/news/112-faculty-news/2526-mohamed-fawzy-ibrahim-issa-s-viva-took-place-on-11st-december-2020.html