

Allegato alla domanda di partecipazione
Curriculum formativo, didattico, scientifico e professionale del candidato

Dichiarazione sostitutiva di certificazioni

(Art. 46, D.P.R. 28 dicembre 2000 n. 445)

Dichiarazione sostitutiva dell'atto di notorietà

(da sottoscrivere davanti all'impiegato addetto o da presentare o spedire con la fotocopia di un documento di identità)

(Art. 47, D.P.R. 28 dicembre 2000 n. 445)

Estremi del bando di selezione	Selezione pubblica per il conferimento di Assegni di Ricerca, ai sensi dell'art. 22 della L. 30/12/2010, n. 240. Titolo del Progetto: Fenotipizzazione multimodale del disturbo del comportamento in sonno REM idiopatico
Informazioni aggiornate al	20/02/2025
Nome e Cognome	Parisa Sattar

Esperienza professionale

Periodo	Ente	Principali attività e responsabilità
Jan 2022 to Apr 2025	Ph.D. Student Medical Devices and Signal Processing, MeDSP <i>University of Cagliari, Cagliari, Italy</i>	<ul style="list-style-type: none"> • Writing full manuscripts for journals and conferences publications • Demonstrating presentations regarding my latest research to general population and experts in the field • Developed graphical user interface using Matlab for sleep staging and Heart Rate Variability Analysis • Performing signal processing and statistical test to identify digital biomarkers for early diagnosis of neuropathological disorders. • Exploring machine learning models for binary and multiclassification problems • Supervising undergraduate students for final year thesis projects
Mar 2024 to Sep 2024	Ph.D. Trainee Institute of Electrical and Biomedical Engineering <i>University for Health Sciences, Medical Informatics and Technology (UMIT), Hall in Tirol, Austria</i>	<ul style="list-style-type: none"> • Recorded EEG and ECG data • Developed memory and strategy task using Eprime software • Studying brain Network modification during memory and strategy task
Jul 2023 to Dec 2023	Ph.D. Trainee Biomedical Signal Interpretation & Computational Simulation (BSICoS) <i>University of Zaragoza, Zaragoza, Spain</i>	<ul style="list-style-type: none"> • Performed respiratory corrected heart rate variability (HRV) analysis • Applied orthogonal space projection techniques to isolate the influence of respiration on HRV • Compared QT variability analysis with HRV analysis
Dec 2022 to Jun 2023	Trainee Engineer Micromed, Solutions for Neurophysiology <i>Treviso, Italy</i>	<ul style="list-style-type: none"> • Developed an algorithm for online cardiac and ocular artifact removal from EEG data
Jun 2019 to Dec 2021	Research Assistant Neurocomputation Lab <i>NED University of Engineering & Technology, Karachi, Pakistan</i>	<ul style="list-style-type: none"> • Wrote full manuscripts for various journals and conferences • Successfully managed to reply to the reviews, revise and submit the manuscript • Conducted literature review about various techniques used for cognitive enhancement and pain management • Wrote grant proposal and research papers • Conducted experiments on healthy and diseases population • Supervised undergraduate students in the various semester and final year projects
Dec 2016 to Jun 2019	Biomedical Engineer & Regulatory Affairs Officer <i>Hoora Pharma, Karachi, Pakistan</i>	<ul style="list-style-type: none"> • Preparation and demonstration of presentations regarding technical/general specification of the equipment for customers and internal teams • Conducted testing and troubleshooting of equipment such as: Chemistry Analyzers, Immunoassay analyzers, Blood Gas Analyzers and other Laboratory Diagnostic equipment of SIEMENS Healthineers and Diasys Diagnostic System • Developed technical compliance sheet for sales department for Health Care Institutions • Managed high volume of correspondence through MS Outlook and phone calls on daily basis which includes; Customer queries, technical complaints and so forth

		<ul style="list-style-type: none"> • Maintained record of all documents related to medical instruments such as, Site Survey Forms, Instrument Movement Forms, Complaint Management System, etc. • Training of clinicians and other lab personnel on appropriate use of equipment • Designed Laboratory Layout using AutoCad for customers initializing new business • Prepared weekly reports for higher management pertaining to regulatory department activities • Organized and representing my department in meetings with higher management • Successfully represented and assisted compliance and quality department in fulfilling the requirement for accreditation of ISO 9001 and GDPMD certification • Efficiently resolved multiple conflicts amongst multidisciplinary departments regarding ISO and GDPMD implementation • Performed monthly internal audit (surprise/informed) of store and MMD department • Developed SOPs and Risk Management Plan for all technical departments during ISO • Analyzed, resolved and settled multiple noncompliant issues of services department • Conducted mock audit with internal audit team of organization for ISO/GDPMD audit • Coordinated with regulatory authorities to ensure all the specifications of projects meet appropriate standards • Preparation of product dossier and identification of risk class for IVD Medical Devices • Managed dedicated projects assigned by the higher management such as, ISO/GDPMD Certification and implementation, Registration of company products by DRAP, research for new markets, etc.
Aug 2015 to Oct 2016	Biomedical Engineer <i>Noor International, Karachi, Pakistan</i>	<ul style="list-style-type: none"> • Handled correspondence related to equipment complaints from customers via email, phone calls and in person • Managed all day to day administrative chores of my department and assisting line manager for special tasks • Successfully trained the customers and internal teams on usage of critical care equipment as well as new inductees and internees on technical aspects of equipment • Planned and delivered weekly presentations to potential customers regarding technical/general specification of the equipment • Developed complete bids on behalf of my organization for Health Care Institutions • Handled multiple projects at a time and met all deliverables by successfully prioritizing specific tasks and responsibilities • Prepared monthly and quarterly reports for higher management pertaining to sales activities and related data through Microsoft Office and Order Management System • Explored about the latest inventions of medical equipment via MEDICA Trade Fair website and designed proposals for introduction of products in Pakistani market

Istruzione, formazione

Data	Titolo / Principali tematiche	Ente
Jan 2022-till	Ph.D. Neurosciences	University of Cagliari
Jul 2017	Masters of Biomedical Engineering	NED University of Engineering and Technology
Mar 2015	Bachlors of Biomedical Engineering	Sir Syed University of Engineering and Technology

Certificazioni

Data	Titolo / Principali tematiche	Ente
Sep 2018	Training on Atellica Automation Solution	SIEMENS Healthineer
Jul 2018	Training on Atellica 1500 Advanced Operator and Troubleshooting	SIEMENS Healthineer
Jul 2018	Awareness of Good Distribution Practices for Medical Devices	SGS Pakistan Private Limited
Sep 2017	Application of Response 910	DiaSys, Germany
Apr 2017	Safety Rules of 1978 and NFPA PK	Pak Fire Services, Pakistan
Apr 2017	Proper usage of Fire Extinguishing Equipment	Pak Fire Services, Pakistan

Publicazioni / Convegni

Sattar, P* , Baldazzi, G., Puligheddu, M. and Pani, D., 2025. The UNICA sleep HRV analysis tool: an integrated open-source tool for heart rate variability analysis during sleep. <i>Physiological Measurement</i> , 13(1), p.015008.
Sattar, P* , Baldazzi, G., Mandas, N., Casaglia, E., Figorilli, M., Giorgetti, L., Mattioli, P., Calizzano, F., Fama, F., Arnaldi, D., Puligheddu, M., Pani, D., Laguna, P., & Bailon, R. (2024). Assessment of QT variability in Parkinson's Disease and REM Sleep Behaviour Disorder during REM phase. (2024) <i>International conference of the European Study Group on Cardiovascular Oscillations, 2024.</i>
Sattar, P* , Baldazzi, G., Mandas, N., Casaglia, E., Figorilli, M., Giorgetti, L., Mattioli, P., Calizzano, F., Fama, F., Arnaldi, D., Pani, D., Laguna, P., & Bailon, R. (2024). Assessment of ventricular repolarization variability in wake states in REM Sleep Behaviour disorder and Parkinson's Diseases. (2024) <i>Computing in Cardiology (CinC). IEEE, 2024.</i>
Sattar, P* , Mandas, N., Baldazzi, G., Facchini, E., Casaglia, E., Figorilli, M., Giorgetti, L., Mattioli, P., Calizzano, F., Fama, F., Arnaldi, D., Puligheddu, M., Pani, D., Laguna, P., & Bailon, R. (2024). Autonomic Dysfunction in REM Sleep Disorder: The Role of Respiration in HRV Analysis. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology. IEEE, 2024</i>
N. Mandas, M. Mollura, G. Baldazzi, P. Sattar , M. Mura, E. Casaglia, M. Figorilli, L. Giorgetti, P. Mattioli, F. Calizzano, F. Famà, D. Arnaldi, M. Puligheddu, D. Pani, and R. Barbieri, Characterization of Sleep Structure and Autonomic Dysfunction in REM Sleep Behavior Disorder , <i>IEEE Open Journal of Engineering in Medicine and Biology, Special Issue, 2024</i>
Sattar, P* , Elisa, F., Baldazzi, G., Mandas, N., Casaglia, E., Figorilli, M., Puligheddu, M. Mattioli, P., Arnaldi, D., Puligheddu, M., and Pani, D. Heart Rate Variability during Sleep-Related Wake Phases in REM sleep Behavior Disorder. (2023) <i>Computing in Cardiology (CinC). IEEE, 2023</i>
Sattar, P* , Baldazzi, G., Mandas, N., Casaglia, E., Figorilli, M., Puligheddu, M. and Pani, D. Parkinson and REM Sleep Behavior Disorder: HRV Difference During Polysomnography. In Proceedings of the 16th International Joint Conference on Biomedical Engineering Systems and Technologies (BIOSTEC 2023) - Volume 4: BIOSIGNALS, pages 366-370 ISBN: 978-989-758-631-6; ISSN: 2184-4305
Hasan MA, Sattar P , Qazi SA, Fraser M, Vuckovic A. Brain Networks with Modified Connectivity in Patients with Neuropathic Pain, and Spinal Cord Injury. <i>Clin EEG Neurosci.</i> 2021 Oct 29;15500594211051485. doi: 10.1177/15500594211051485. Epub ahead of print. PMID: 34714181.
Shahid H, Ejaz O, Sattar P* , Khan MM, Zubair F, Mukhtar M, Farooq U, Nehal M, Sheikh H, Lodhi H, Hasan, MA, 2021. Transcranial Direct Current Stimulation (tDCS): A Promising Therapy for Attentional Enhancement. In: <i>1st International Conference on Applied Physics and Engineering 2021.</i>
Ejaz O, Shahid H, Sattar P* , Farooq U, Nehal M, Sheik H, Khan MM, Zubair F, Mukhtar M, Lodhi H, Hasan MA, 2021. Transcranial Direct Current Stimulation (tDCS): An Effective & Non-Medicated Treatment for Psychological Disorders. In: <i>1st International Conference on Applied Physics and Engineering 2021.</i>

Altre attività scientifiche

13th International conference of the European Study Group on Cardiovascular Oscillations, Zaragoza, Spain, October 2024
46th International Conference of the IEEE Engineering in Medicine and Biology. Orlando, USA, July 2024
50th International Conference on Computing and Cardiology, Atlanta, USA, October 2023
16th International Conference on Bio-inspired Systems and Signal Processing, Spain, Portugal, Feb 2023
8th Internal Summer of School Neuroengineering organized and hosted by University of Genoa, Italy, Jul 2022
BCI & Neurotechnology Spring School organized and hosted by g.tec medical engineering GmbH, Apr 2020
Implementation and Evaluation of Digital Health Interventions from LMIC perspective, Dec 2019

Competenze tecniche

Neuroscience- EEGLab, LORETA, Eprime, MNE Scan and OpenSignal
Data Collection- Experienced on EEG devices range from 1 to 52-Channels for EEG data recording
Programming- MATLAB
Bio-signals Processing- filtration, time domain analysis, frequency domain analysis, nonlinear analysis, complexity analysis graph theory analysis and brain connectivity analysis.
Biomedical Engineering- Product installation, Dossier preparation of medical devices, Designing of SOPs as per GDPMD and ISO standards

Lingue

Urdu (Mother Tongue)
English IELTS (Listening 9 Reading 7.5 Writing 8 Spoken 9)
Italian (A1)

Affiliazioni professionali

Pakistan Engineering Council (PEC) 2016- Present
Institute of Electrical and Electronics Engineers (IEEE) 2023-Present
National Group of Bioengineering (GNB) 2023-Present

Cagliari, 20/02/2025