Research Associate / Engineer (Brain Computer
Interface) - VAP3
Singapore Institute of Technology

Job Title	Research Associate / Engineer (Brain Computer Interface) - VAP3
Department	
Institution	Singapore Institute of Technology
	Singapore, , Singapore
Date Posted	May 24, 2024
Application Deadline	Open until filled
Position Start Date	Available immediately
Job Categories	Research Scientist/Associate
Academic Field(s)	Computer Engineering
	Computer Science
Job Website	https://careers.singaporetech.edu.sg/cw/en/job/498686/research-associate-engineer-brain-computer-interface-vap3
Apply By Email	
Job Description	

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Job no: 498686
Department: Infocomm Technology
Contract type: Contract

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As a University of Applied Learning, SIT works closely with industry in our research pursuits. Our research staff will have the opportunity to be equipped with applied research skill sets that are relevant to industry demands while working on research projects in SIT.

The primary responsibility of this role is to deliver on a research project in the area of Brain Computer Interface funded by the Ministry of Education where you will be a key member of the research team to develop a Non-Invasive Closed-loop Brain Computer Interface for Decoding and Control of Motor Imagery Kinematics.

Key Responsibilities

- Actively participate in the execution of the research project with the Principal Investigator (PI), Co-PIs and the research team members to ensure all project deliverables are met.
- Support the development of novel signal processing and machine learning methods for Brain Computer Interface (BCI)-based motor imagery kinematics decoding.
- Development of real-time Electroencephalogram (EEG) data processing architecture and associated Software.
- Development of the experimental paradigm and graphical user interface for Motor Imagery-speed decoding the speed-Error-related Potential detection.
- Integration of the Motor Imagery direction and speed decoder with the Error-related potential detector.
- Conducting BCI studies on healthy subjects as well as stroke patients in the hospital.
- Work together with a team of researchers to implement and test the BCI system, and also to evaluate the effectiveness of the system.
- Publish research findings in reputable journals and present at conferences and workshops.
- Work independently, as well as within a team, to ensure that project deliverables are met.

Job Requirements

- Bachelor's and Master's degree in Electrical/Electronic/Computer Engineering with a good minimum CGPA, and research experience in Brain Computer Interface. Candidates in the completion stage of Ph.D. are preferred.
- Good grades for the postgraduate courses on (i) Digital Signal Processing and (ii) Probability and statistics.
- A minimum of three years of research experience after the Master's degree in Motor Imagery Brain Computer Interface Systems.
- Good record of research publications (at least one top-tier Journal).

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- Proficiency in MATLAB.
- Strong analytical and problem-solving skills, with the ability to critically evaluate and interpret research data.
- Excellent written and verbal communication skills, with the ability to publish research findings in top-tier journals and present papers at conferences.
- Ability to work both independently and collaboratively in a research team environment.

Apply now
Advertised: 24 May 2024 Singapore Standard Time
Applications close: 31 Dec 2024 Singapore Standard Time

Contact Information

Please reference Academickeys in your cover letter when applying for or inquiring about this job announcement.

Contact

Singapore