OFFSHORE TECHNOLOGY INNOVATION CENTRE

RESEARCH SCHOLARSHIP OPPORTUNITY

Position reference number	DGT5 ME2	Deadline for application	March 31, 2025

Institution	Universidade de São Paulo
Department	Departamento de Engenharia de Computação e Sistemas Digitais
Supervisor	Eduardo Aoun Tannuri

Funding source	FAPESP	**Type**	MASTER DEGREE
Duration (months)	36	**Hours/week**	40
Monthly stipend	R$3.300,00 (BRL Brazilian Reais)		
Workplace	Escola Politécnica, Universidade de São Paulo, Av. Prof. Melo Moraes 2231, Cidade Universitária, São Paulo SP, Brasil		
Planned start date	April 2025		

Project title: Data Fusion and Distributed Monitoring for Ocean Engineering	**Título do projeto** Fusão de dados e monitoramento distribuído para engenharia oceânica
Research theme • MLOps • Machine Learning infraestrucutre	**Tema de pesquisa** • MLOps • Infraestrutura de Machine Learning
Project abstract The project goal is to specify, design and implement an environment to develop and deploy Machine Learning (ML) models. Therefore, it will be necessary to understand the requirements defined by the different project groups, which develop different ML models for ocean energy systems. It will be necessary to research alternatives and adapt them to the context, involving research in the area of Software Engineering and ML, following MLOps concepts. We expect to prepare an MLOps environment that meets these needs, defines and executes a process for deploying these models.	**Resumo do projeto** O objetivo do projeto é especificar, projetar e implementar um ambiente para desenvolver e implantar modelos de *Machine Learning* (ML). Para isso será necessário entender os requisitos definidos pelos diferentes grupos do projeto, que desenvolvem diferentes modelos de ML para sistemas oceânicos de energia. Será necessário pesquisar alternativas e adaptá-las para o contexto, envolvendo pesquisas na área de Engenharia de Software e ML, seguindo conceitos de MLOps. A expectativa é preparar um ambiente de MLOps que atenda a essas necessidades, defina e execute um processo para implantação desses modelos.
Requirements for the candidate	**Requisitos para o candidato**

• Have extensive knowledge of programming, preferably in Python language • Knowledge of Software Engineering • Knowledge of Machine Learning • Knowledge of the English language	• Ter amplo conhecimento em programação, de preferência na linguagem Python • Conhecimentos de Engenharia de Software • Conhecimentos em Machine Learning • Conhecimento de língua inglesa

NOTES
- This research scholarship is offered by the OTIC – Offshore Technology Innovation Centre, a research center based at the University of São Paulo, Brazil.
- The scholarship will cover a standard monthly stipend determined by the funding agencies.
- Foreign candidates must fulfill the immigration requirements and obtain the necessary visas to work as researchers in Brazil. (Help will be offered to the selected candidate.)
- After the application process, potential candidates will be invited for personal or remote interviews.

REQUIRED DOCUMENTS FOR APPLICATION
- Single-page presentation letter. Introduce yourself and share your motivations for applying for this position.
- Brief curriculum vitae with academic and professional experience, highlighting the skills that will contribute to this position.
- Recommendation letters (optional). One or two recommendation letters will help support your application.

APPLICATION PROCESS
- Prepare an e-mail to otic.jobs@usp.br.
- Add "Application to [DGT5 ME2]" to the subject.
- Gather all required documents above and attach them in PDF format.
- Send your application before the deadline above.

If you have any questions, please write to otic.jobs@usp.br.