Center for Artificial Intelligence

FORMULÁRIO DE DESCRIÇÃO DE VAGA PARA DIVULGAÇÃO E PROCESSO SELETIVO	
Lead Institution: USP **Address:**	
Supervisor name: A. Delbem, A. Saraiva, a C4AI-AgriBio coPI	**Supervisor department: Poli-USP, ICMC-USP, other USP institute associated to C4AI-AgriBio**
Type (undergrad, master, PhD, PD): PhD **Number of months: 36 months**	**2 vagas de doutorado**
Project title: construção de modelos causais a partir de dados crus para tomada de decisões multicritério ("construction of causal models from raw data for multcriteria decision making")	
Research Group: C4AI-AgriBio	

Description (English)

The candidate will collaborate with researchers from the project 'AgriBio Challenge' of the Center for Artificial Intelligence at the University of São Paulo. A summary of the Center and projects can be found at the C4AI website (https://c4ai.inova.usp.br/)

The project deals with agribusiness and social data, mainly involving low-income producers and consumers, focusing on building models that benefit the generation of mechanisms and decision-making by managers in favour of increasing food security and quality.

The applicant will contribute to the main objectives of the project through the following activities:
1. Treatment of large-scale structured and unstructured data;
2. Development of computational methods for automatically constructing (explainable) models based on graphs;
3. Development of methods for testing causality of the learned relationships from models;
4. Selection of models based on multiple criteria or objectives.

Requirements to fill the position. (Ex: specific experience, minimum or maximum years after concluding the course) (Portuguese and English)

This project is suitable for a candidate with undergraduate degree and/or master with a focus on innovations in Artificial Intelligence with the potential for socio-economic impact. The candidate needs to know at least programming in C or R or Python, in addition to training in one or more of the following areas: i) inferential statistics (classical or Bayesian), or ii) multi-criteria decision making, or iii) data mining; or iv) evolutionary computation, or v) optimization.

Informações sobre a bolsa / local de trabalho
FUSP Scholarship (X) BRL 3.808,66 per month (1st year) and BRL 4.713,77 per month (following years).
Location: Sao Paulo -SP with periods in Sao Carlos – SP or vice versa.

Observation: Attendance in person must prevail during normal sanitary periods to carry out activities in USP research laboratories.A frequência presencial deve ser dominante em períodos de normalidade sanitária para realizar atividades nos laboratórios de pesquisa da USP.

The doctorate can be developed in one of the many institutes from USP, for example:
- Institute of Mathematics and Computer Science (ICMC-USP)
- Polytechnic School (EP-USP)
- São Carlos School of Engineering (EESC-USP)
- Luiz de Queiroz College of Agriculture (ESALQ-USP)
- Institute of Astronomy, Geophysics and Atmospheric Science (IAG-USP)
- Institute of Mathematics and Statistics (IME-USP)
- School of Economics, Business Administration and Accounting at Ribeirão Preto (FEARP-USP)
- School of Economics, Business and Accounting (FEA-USP)
- Faculty of Philosophy, Languages, and Human Sciences (FFLCH-USP)