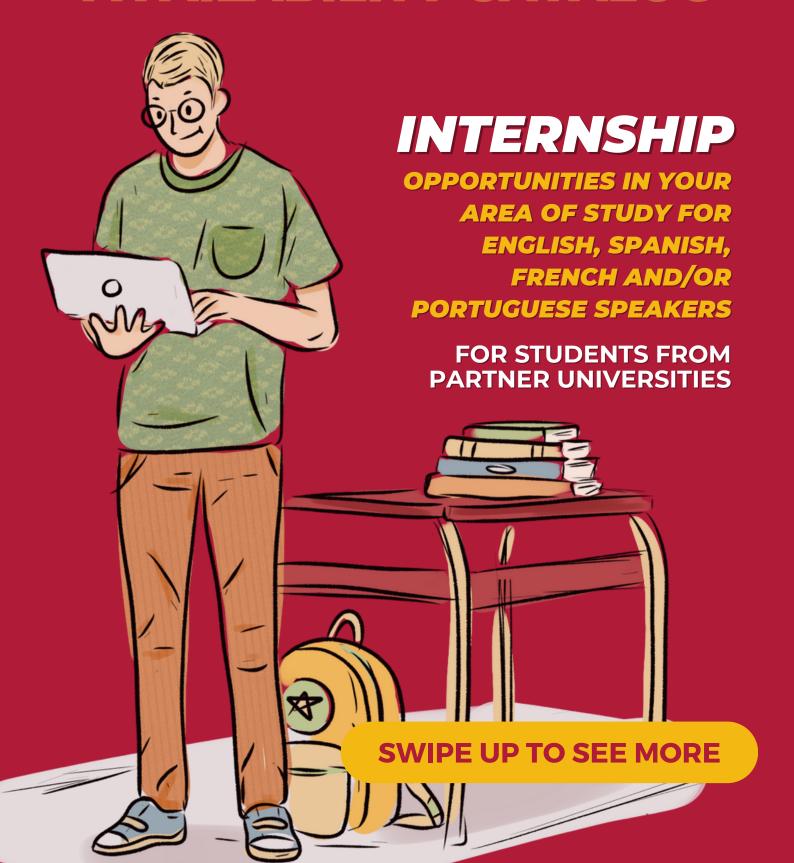




RESEARCH/INTERNSHIP AVAILABILITY CATALOG





Activities and studies about entrepreneurship in the business incubator

Supervisor's Full Name: André Luís Silva

Area of study: Computing, Industrial Engineering,

Business, Economy

Internship Description:

The project is to work with activities to support the business incubator. The activities will be:

1- entrepreneurship courses;

2-preparation of selection process;

3-incubation process;

4-analysis of indicators.

Level of Study: Undergraduate or Master's student

Term/Period of the Studies: At any stage of the program

Modality of the Internship: Exclusively remote/online

Prior Experience Required: Previous knowledge in

entrepreneurship

Language Required for the Internship: English

Length of the internship: 5 to 6 months

Internship availability: 1st (March-July) or 2nd

(August-December) semester

Number of Places/Positions Available: Only 1, either for

the 1st semester or the 2nd one

Machine Learning/Convolutional Neural Networks

Supervisor's Full Name: Eduardo da Silva Ribeiro

Area of study: Machine Learning/Convolutional Neural Networks

Internship Description:

In recent years, deep networks have become popular, surpassing the state-of-the-art in several learning tasks. Convolutional neural networks perform well in tasks such as image classification and object detection. Most proposed Convolutional Neural network architectures use the crossentropy loss function. This has a rapid convergence but can lead to overfitting of the model. To overcome this problem, architectures need to use regularization techniques. In the work to be developed, we intend to investigate loss functions that work directly on the features to design a space with inter-class separation and intra-class compactness. To advance this study, distance metrics between features will be investigated and experiments will be carried out on datasets such as CIFAR10, CIFAR100 and Imagenet100.

Level of Study: Undergraduate or Master's student

Term/Period of the Studies: At any stage of the program

Modality of the Internship: Face-to-face or remote/online

Prior Experience Required: None

Language Required for the Internship: English

Length of the internship: 5 to 6 months

Internship availability: 1st (March-July) or 2nd

(August-December) semester

Number of Places/Positions Available: Only 1, either for

the 1st semester or the 2nd one



Graphic expression in architecture and engineering

Supervisor's Full Name: Clarisse Martins Villela

Area of study: Engineering, Architecture and Urbanism **Internship Description:**

Estudies in graphic expression and representation

Level of Study: Undergraduate or Master's student

Term/Period of the Studies: At any stage of the program

Modality of the Internship: Face-to-face or

remote/online

Prior Experience Required: None

Language Required for the Internship: English or

Spanish

Length of the internship: 1 to 4 months

Internship availability: 1st (March-July) or 2nd

(August-December) semester





Use of mining tailings for the production of construction materials

Supervisor's Full Name: Guilherme Jorge Brigolini Silva

Area of study: Civil Engineering, Materials Engineering, Architecture

Internship Description:

Carry out tests and other experimental procedures: develop and produce bricks with white marble waste. Evaluate the mechanical properties. Participate in discussions and interpretation of results. participate in the production of technical reports and scientific articles.

Level of Study: Undergraduate or Master's student

Term/Period of the Studies: At any stage of the program

Modality of the Internship: Exclusively face-to-face

Prior Experience Required: None

Language Required for the Internship: English

Length of the internship: 2 to 12 months

Internship availability: 1st (March-July) or 2nd

(August-December) semester



Estudo aprofundado da situação e necessidades de saúde de Antônio Pereira, Ouro Preto-MG

Supervisor's Full Name: Aisllan Diego de Assis

Area of study: Medicina, Educação, Saúde Pública **Internship Description:**

Realizar pesquisa quanti qualitativa utilizando práticas grupais, aplicações de instrumentos de avaliação da saúde mental e análise territorial em comunidade atingida por barragem e mineração.

Level of Study: Undergraduate or Master's student

Term/Period of the Studies: At any stage of the program

Modality of the Internship: Face-to-face or

remote/online

Prior Experience Required: None

Language Required for the Internship: Portuguese

Length of the internship: 2 to 12 months

Internship availability: 1st (March-July) or 2nd

(August-December) semester



Incorporation of bioactive molecules into micelles and nanoemulsions

Supervisor's Full Name: Marcus Vinícius Cangussu Cardoso

Area of study: Chemistry, Pharmacy, Biotecnology, Biology

Internship Description:

Preparation of systems containing bioactive molecules incorporatet into into micelles and nanoemulsions. The main goal is investigating intermolecular interactions contributing for the incorporation and its kinetic and dynamic behaviour by nuclear magnetic resonance and other techniques.

Level of Study: Undergraduate or Master's student
Term/Period of the Studies: In the middle or in the final
years of the program

Modality of the Internship: Exclusively face-to-face

Prior Experience Required: None

Language Required for the Internship: English

Length of the internship: 3 to 6 months

Internship availability: 1st (March-July) or 2nd

(August-December) semester

Number of Places/Positions Available: 2 places, either

for the 1st semester or the 2nd one

Plus Ultra - Research and Extension Group

Supervisor's Full Name: Yuri Queiroz Abreu Torres

Area of study: Urban Engineering, Arquitecture and Urbanism

Internship Description:

We are a research and extesion group with focus on open public spaces, notably in historical/heritage contexts. Our team has been working closely to the municipality in many landscape design projects. We expect the interns to help us in all stages of the projects: insite surveys, design conception, drawing in all phases, 3D modelling and final presentations.

Level of Study: Undergraduate or Master's student **Term/Period of the Studies:** In the middle or in the final years of the program

Modality of the Internship: Exclusively face-to-face
Prior Experience Required: Autocad or similar
(advanced), 3D modelling-various (advanced), Adobe
Illustrator and Photoshop

Language Required for the Internship: English

Length of the internship: 2 to 6 months

Internship availability: 1st (March-July) or 2nd

(August-December) semester

Understanding Machine Learning Algorithms

Supervisor's Full Name: Talles Henrique de Medeiros

Area of study: Computer Engineering, Computer Science, Electrical Engineering, Data Science Internship Description:

The objective of this project is to present the machine learning area and its applications so that the student can be trained in the development of computational solutions. During the internship period, the student must generate summaries of the techniques presented by the advisor and develop codes that demonstrate the potential of each technique. This material will serve as an example in public repositories for learning. The final product of the internship should be a repository with reports and codes developed by the student.

Level of Study: Undergraduate or Master's student
Term/Period of the Studies: At any stage of the program
Modality of the Internship: Face-to-face or
remote/online

Prior Experience Required: Python; Artificial Intelligence
Language Required for the Internship: English
Length of the internship: 5 to 6 months
Internship availability: 1st (March-July) or 2nd
(August-December) semester
Number of Places/Positions Available: 1 place in the 1st



Sustainability and technological innovation

Supervisor's Full Name: Sergio Evangelista Silva

Area of study: Industrial Engineering, Business/

Administration

Internship Description:

Search in international databases - Scopus and Web of Science - about researchers of the impact of innovation in sustainability goals. Perform documental research for support the research.

Level of Study: Undergraduate or Master's student **Term/Period of the Studies:** In the final years of the program

Modality of the Internship: Face-to-face or remote/online

Prior Experience Required: None

Language Required for the Internship: English

Length of the internship: 4 to 6 months

Internship availability: 1st (March-July) or 2nd

(August-December) semester

Economic Complexity: social and environmental impacts

Supervisor's Full Name: Diogo Ferraz

Area of study: Economy, Engineering, Business/

Administration

Internship Description:

The candidate's primary task involves conducting research on the interplay between economic complexity and productive structures, exploring their effects on social and environmental dimensions. This opportunity entails utilizing both international and national databases, such as the World Bank and IBGE, alongside illustrating figures and maps. The candidate will employ mathematical and statistical models, including descriptive statistics and specialized econometric models like linear regressions, particularly when dealing with panel data. Additionally, the candidate will employ Data Envelopment Analysis to formulate indicators. Beyond individual research pursuits, collaboration forms a significant aspect as the candidate will engage with undergraduate, master's, and PhD students.

Level of Study: Undergraduate or Master's student

Term/Period of the Studies: At any stage of the program

Modality of the Internship: Face-to-face or remote/online

Prior Experience Required: Preferably STATA e/ou R

Language Required for the Internship: English

Length of the internship: 2 to 6 months

Internship availability: 1st (March-July) or 2nd

(August-December) semester

Heart rate variability biofeedback in the mental health

Supervisor's Full Name: Gabriela Guerra Leal de Souza

Area of study: Psychology, Medicine, Biology **Internship Description:**

The student will participate in the presentation of papers in the weekly meetings of the Laboratory of Psychophysiology, collect data from human volunteers during the experiments, process biological and psychological data, and analyze and interpret biological and psychological data.

Level of Study: Undergraduate or Master's student
Term/Period of the Studies: In the middle or in the final
years of the program

Modality of the Internship: Exclusively face-to-face

Prior Experience Required: None

Language Required for the Internship: English or

Spanish

Length of the internship: 2 to 5 months

Internship availability: 1st (March-July) or 2nd

(August-December) semester

Treatment of wastes and wastewaters for removing micropollutants and/or recovering energy

Supervisor's Full Name: Sérgio Francisco de Aquino

Area of study: Chemistry or Chemical Engineering or Environmental Engineering

Internship Description:

The project involves the use of anaerobic digestion process on its own or coupled to thermal treatment processes to recovery energy from wastes (eg. STP sludge, urban solid waste) and wastewaters (eg. sanitary sewage) and removal of emerging contaminants (eg. antibiotics, perfluorinated compunds). The student will help in physical-chemical characterization of samples, operation and monitoring of bioreactors as well as interpreting experimental data and preparing reports.

Level of Study: Undergraduate or Master's student
Term/Period of the Studies: In the middle or in the final
years of the program

Modality of the Internship: Exclusively face-to-face

Prior Experience Required: None

Language Required for the Internship: English or

Spanish

Length of the internship: 4 to 6 months

Internship availability: 1st (March-July) or 2nd

(August-December) semester

Educación Matemática y sus relacciones con la practica docente y el desarrollo profesional

Supervisor's Full Name: Ana Cristina Ferreira

Area of study: Mathematical Education, Education, Pedagogy Internship Description:

En el período de su estancia en la universidad, el(la) estudiante participará de actividades variadas tales como: clases en el curso de formación de profesores de Matemáticas (Licenciatura em Matemática) y en disciplinas de la Maestría en Educación Matemática (para saber más, vea www.ppgedmat.ufop.br) impartidas por mi y, eventualmente, por otros docentes, caso sea de interés del(de la) estudiante; acciones de extensión en la propia universidad o en escuelas de la región; reuniones en el grupo de pesquisas acerca del desarrollo profesional docente de profesores que enseñan matemáticas; en reuniones de orientación de investigaciones en desarrollo; en eventos del área, etc.

Level of Study: Undergraduate or Master's student

Term/Period of the Studies: In the middle or in the final years

of the program

Modality of the Internship: Exclusively face-to-face

Prior Experience Required: Reading skills in Portuguese

language or Spanish language

Language Required for the Internship: Spanish

Length of the internship: 1 to 6 months

Internship availability: 1st (March-July) or 2nd

(August-December) semester



Mining and aquatic biodiversity: short term and long term impacts

Supervisor's Full Name: Eneida Eskinazi Sant'Anna

Area of study: Biology, Environmental Engineering **Internship Description:**

The trainee will participate in the assembly and execution of experiments with aquatic organisms, to test the hypothesis that the entry of iron mining tailings in aquatic environments can impact aspects of the natural history of aquatic invertebrates in short and long term.

Level of Study: Undergraduate or Master's student
Term/Period of the Studies: In the middle or in the final
years of the program

Modality of the Internship: Exclusively face-to-face

Prior Experience Required: Basic knowledge in software R **Language Required for the Internship:** English or Spanish

Length of the internship: 1 to 6 months

Internship availability: 2nd (August-December)

semester

Number of Places/Positions Available: 1 place in the 2st semester



LGBT+: Law and Health

Supervisor's Full Name: Alexandre Gustavo Melo Franco de Moraes Bahia

Area of study: Law, Social Sciences, Philosophy **Internship Description:**

Participation in the meetings of the research group "LGBT+: Law and Health". Presentation and production of texts. Participation in at least one of the classes of the discipline "Equality in Diversity" of the UFOP Postgraduate Program in Law.

Level of Study: Master's student

Term/Period of the Studies: At any stage of the program Modality of the Internship: Face-to-face or

remote/online

Prior Experience Required: None

Language Required for the Internship: English or Spanish

Length of the internship: 2 to 6 months

Internship availability: 1st (March-July) or 2nd (August-

December) semester



Corruption in the ancient Rome

Supervisor's Full Name: Fábio Faversani

Area of study: History, Language Studies

Internship Description:

Corrupción en la Roma antigua.

Level of Study: Undergraduate or Master's student

Term/Period of the Studies: At any stage of the program

Modality of the Internship: Exclusively face-to-face

Prior Experience Required: Research interest in the field

of Classical Studies

Language Required for the Internship: English or Spanish

Length of the internship: I to 6 months

Internship availability: 2nd (August-December)

semester

Number of Places/Positions Available: 1 place in the 2st

semester





Strategies to improve care actions for people with obesity within the scope of Primary Health Care

Supervisor's Full Name: Erika Cardoso dos Reis

Area of study: Saúde Pública, Nutrição, Enfermagem **Internship Description:**

Activities consist of conducting research on strategies to improve care for people with obesity and participating in project activities.

Level of Study: Undergraduate or Master's student

Term/Period of the Studies: At any stage of the program

Modality of the Internship: Exclusively face-to-face

Prior Experience Required: Habilidades com editores de

texto e excel

Language Required for the Internship: Portuguese

Length of the internship: 2 to 6 months

Internship availability: 1st (March-July) or 2nd (August-

December) semester





Metodología de enseñanza del deporte y la salud

Supervisor's Full Name: Siomara Aparecida da Silva

Area of study: Physical Education, Psychomotricity, Pediatric Neurology, Pedagogy

Internship Description:

Monitorear proyectos en marcha, contribuir en ellos, asignar valores a las diferencias culturales, monitorear reuniones semanales de laboratorio y algunas disciplinas que contribuyeron a la formación académica.

Level of Study: Undergraduate or Master's student **Term/Period of the Studies:** In the middle or in the final years of the program

Modality of the Internship: Exclusively face-to-face Prior Experience Required: None

Language Required for the Internship: Spanish

Length of the internship: 12 months

Internship availability: 1st (March-July) or 2nd

(August-December) semester

Metal-based compounds as drug candidates

Supervisor's Full Name: Rodrigo de Souza Corrêa

Area of study: Chemistry, Pharmacy, Physics, Biology **Internship Description:**

- Introduction to the basic concepts of experimental work in preparative inorganic chemistry;
- Synthesis of chemical compounds;
- Characterization using the main analytical techniques;
- Interaction studies with biomolecules (DNA);
- Presentation of the main results and scientific reports.

Level of Study: Undergraduate or Master's student Term/Period of the Studies: At any stage of the program

Modality of the Internship: Exclusively face-to-face Prior Experience Required: Knowledge in basic chemistry

Language Required for the Internship: English

Length of the internship: I to 6 months

Internship availability: 1st (March-July) or 2nd

(August-December) semester

Number of Places/Positions Available: 2 place, either

for the 1st semester or the 2nd one

Analisis de sag e well en sistemas de potencia/alumno de graduación/Sistemas Eléctricos de Potencia

Supervisor's Full Name: Wilingthon Guerra Zvietcovich

Area of study: Electrical Engineering **Internship Description:**

Este proyecto trata sobre el tema: Análisis de variaciones transitorias de voltaje (afundamentos/elevaciones o sag/swell) cuando se presentan condiciones de cortocircuito en redes eléctricas. Dentro de este análisis el estudiante deberá estudiar este tema, estudiar trabajos publicados en la literatura y desarrollar una metodología para identificar las barras de una red eléctrica, que sufren con estas variaciones de voltaje. Esta última parte se realizará utilizando programación y preferiblemente matlab.

Level of Study: Undergraduate student

Term/Period of the Studies: In the beginning of the

program

Modality of the Internship: Exclusively face-to-face

Prior Experience Required: Programming and having

studied Power Systems

Language Required for the Internship: Spanish

Length of the internship: 5 to 6 months

Internship availability: 1st (March-July) semester

Number of Places/Positions Available: 1 place, in the 1st

semester



Study of arbovirus pathogenesis and prospection of antiviral compounds

Supervisor's Full Name: Cintia Lopes de Brito Magalhães

Area of study: Biology, Pharmacy, Biotechnology,

Biomedical

Internship Description:

To study the pathogenesis of arboviruses in animal models and to predict the presence of antiviral substances in natural compounds.

Level of Study: Master's student

Term/Period of the Studies: At any stage of the

program

Modality of the Internship: Exclusively face-to-face

Prior Experience Required: Works in the area of

Microbiology

Language Required for the Internship: English or

Spanish

Length of the internship: 5 to 6 months

Internship availability: 1st (March-July) or 2nd

(August-December) semester

Number of Places/Positions Available: 1 place,

either for the 1st semester or the 2nd one



Modern astronomy

Supervisor's Full Name: Hermano Endlich Schneider Velten

Area of study: Physical; Astronomy **Internship Description:**

The student should follow a project proposed by the advisor in modern areas of astrophysics and cosmology.

Level of Study: Undergraduate or Master's student **Term/Period of the Studies:** At any stage of the

program

Modality of the Internship: Exclusively face-to-face

Prior Experience Required: None

Language Required for the Internship: French

Length of the internship: 2 to 6 months

Internship availability: 1st (March-July) or 2nd

(August-December) semester

Polysemic interactions of mathematics, cultures, and STEM Education: valuing diversity in our communities

Supervisor's Full Name: Milton Rosa

Area of study: Mathematics Education, Distance Education, Educational Leadership, Multicultural Education

Internship Description:

The activities are: a) participation in the UFOP research group in Ethnomathematics, b) sharing cultural mathematical possibilities in their communities in their own context, c) reading related to mathematics education, cultures, ethnomathemathetics, and mathematical modelling, d) research the connections between STEM Education and Mathematics Education, e) explore connections between culturally diverse environments related to mathematics and cultures, and f) elaborate and outline an article for submission in the Journal of Mathematics and Culture and ISGEm Newsletter (International Study Group on Ethnomathematics).

Level of Study: Undergraduate or Master's student

Term/Period of the Studies: At any stage of the program

Modality of the Internship: Face-to-face or remote/online

Prior Experience Required: None

Language Required for the Internship: English

Length of the internship: 2 to 6 months

Internship availability: 1st (March-July) or 2nd (August-

December) semester



Descarbonization of iron and steelmaking/Carbon Credits

Supervisor's Full Name: Paulo Santos Assis

Area of study: Metallurgical Engineering, Materials Engineering, Energy, Biotechnology **Internship Description:**

Develop some studies showing a comparison of technologies using types of Hydrogen to reduce the GHG.

Level of Study: Undergraduate or Master's student **Term/Period of the Studies:** In the final years of the program

Modality of the Internship: Exclusively face-to-face
Prior Experience Required: Work with software,
mathematical modeling and laboratory
experiments

Language Required for the Internship: English
Length of the internship: 4 to 6 months
Internship availability: 1st (March-July) or 2nd
(August-December) semester

Practice in absorption and fluorescence spectroscopy techniques for characterization of photophysical properties of the photoluminescent materials

Supervisor's Full Name: Thiago Cazati

Area of study: Experimental Physics **Internship Description:**

The student will learn how to use equipment and techniques to characterize the photophysical properties of photoluminescent materials. The techniques involve absorption spectroscopy, stationary and time-resolved photoluminescence. The student will participate in ongoing research at the Laboratory of Optoelectronic Materials.

Level of Study: Undergraduate or Master's student **Term/Period of the Studies:** In the middle or in the final years of the program

Modality of the Internship: Exclusively face-to-face

Prior Experience Required: None

Language Required for the Internship: English

Length of the internship: 2 to 6 months

Internship availability: 1st (March-July) or 2nd

(August-December) semester

Lithologic, geomorphic, and climatic controls on the geochemistry of soils and sediments in Quadrilátero Ferrífero (Iron Quadrangle): a meta-analysis

Supervisor's Full Name: Mariangela Garcia Praça Leite

Area of study: Environmental Geology **Internship Description:**

Statistical analysis (univariate and multivariate) of geochemical data of soils and sediments of the Quadrilátero Frirífero. Creating isovalue maps in ArcGis.

Level of Study: Undergraduate or Master's student **Term/Period of the Studies:** At any stage of the program

Modality of the Internship: Face-to-face or remote/online

Prior Experience Required: ArcGis and statistics programs

Language Required for the Internship: English or Spanish or French

Length of the internship: 5 to 6 months
Internship availability: 1st (March-July) or 2nd
(August-December) semester
Number of Places/Positions Available: 1 place

Number of Places/Positions Available: 1 place, either for the 1st semester or the 2nd one

Etnomodelling: Multicultural Mathematics Education using Mathematical Modeling / STEM

Supervisor's Full Name: Daniel Clark Orey

Area of study: Ethnomathematics, Ethnomodeling, Mathematical Modeling, Mathematics Education **Internship Description:**

We will share work we have done previously, publications and do work on our math trail here in Ouro Preto.

Level of Study: Undergraduate or Master's student **Term/Period of the Studies:** In the beginning of the program

Modality of the Internship: Face-to-face or remote/online

Prior Experience Required: Ethnomathematics, Ethnomodeling, Mathematical Modeling, Mathematics Education

Language Required for the Internship: Portuguese, English and Spanish

Length of the internship: 2 to 6 months

Internship availability: 1st (March-July) or 2nd

(August-December) semester

Number of Places/Positions Available: 1 place,

either for the 1st semester or the 2nd one

A Marie

Evaluation of the effects of exposure to the anesthetic Isoflurane in cells and in animals submitted to a high-fat diet

Supervisor's Full Name: Frank Silva Bezerra

Area of study: Medicine, Pharmacy, Nursing,

Physiotherapy

Internship Description:

Biochemical analyzes; morphometric analyzes; literature review; scientific article writing; statistical analyzes.

Level of Study: Undergraduate or Master's student Term/Period of the Studies: In the middle or in the

final years of the program

Modality of the Internship: Exclusively face-to-face

Prior Experience Required: Physiology, Histology,

Biochemistry, Anatomy, Animal Experimentation

Language Required for the Internship: English or Spanish

Length of the internship: 5 to 6 months

Internship availability: 1st (March-July) or 2nd

(August-December) semester

Production of Bricks Using Alkaline Activation of iron ore tailing

Supervisor's Full Name: Guilherme Jorge Brigolini Silva

Area of study: Civil Engineering, Materials Engineering **Internship Description:**

The gross production of iron ore in Brazil in 2017 reached approximately 600 million tons. Out of this total, around 75% underwent beneficiation, resulting in significant amounts of waste. When these wastes do not have a useful purpose, they are deposited in dams, which can lead to environmental and social damage in cases of accidents and breaches. On the other hand, another sector that is also rapidly growing and causing environmental impacts is the construction industry. In 2016, cement production generated approximately 2.2 billion tons of CO2.

Level of Study: Undergraduate or Master's student Term/Period of the Studies: At any stage of the program

Modality of the Internship: Exclusively face-to-face

Prior Experience Required: None

Language Required for the Internship: English

Length of the internship: 4 to 6 months

Internship availability: 1st (March-July) or 2nd

(August-December) semester

Physical performance, nutrition and genetic profile influencing sarcopenia in the elderly

Supervisor's Full Name: Daniel Barbosa Coelho

Area of study: Physical Education, Physiotherapy, Medicine, Nursing Internship Description:

Laboratory bench activities, field activities for onsite data collection through performance tests, academic functions such as participation in laboratory group scientific meetings and congresses.

Level of Study: Undergraduate or Master's student **Term/Period of the Studies:** At any stage of the program

Modality of the Internship: Exclusively face-to-face

Prior Experience Required: None **Language Required for the Internship:** English or Spanish

Length of the internship: 1 to 6 months
Internship availability: 1st (March-July) or 2nd
(August-December) semester
Number of Places/Positions Available: 1 place,
either for the 1st semester or the 2nd one

Development of pharmaceutical and/or cosmetic formulation with natural products

Supervisor's Full Name: Orlando David Henrique dos Santos

Area of study: Pharmacy, Biotechnology, Biological Engineering, Chemistry

Internship Description:

This projetcs involves the study of natural products composition and/or biological activities and the development of formulations for pharmaceutical or cosmetic application. Plant extracts will be produced and analysed for antioxidant, antimicrobial and antiiflammatory activities. After, nanostructured formulations, specially nanoemulsions and nanoparticles will be produced and chraracterized.

Level of Study: Undergraduate or Master's student **Term/Period of the Studies:** In the middle or in the final

years of the program

Modality of the Internship: Exclusively face-to-face

Prior Experience Required: None

Language Required for the Internship: English or Spanish

Length of the internship: 2 to 6 months

Internship availability: 1st (March-July) or 2nd (August-

December) semester

Creative Tourism; Creative Economy: Rural Tourism; Gastronomy

Supervisor's Full Name: Alissandra Nazareth de Carvalho

Area of study: Tourism, Administration, Geography, History

Internship Description:

Bibliographic survey on the theme of creative tourism and gastronomic tourism; elaboration of reports after technical visits made; support for professors in carrying out extension projects linked to the subject of study; support in holding extension events; support in the dissemination of activities carried out with the academic community.

Level of Study: Undergraduate or Master's student Term/Period of the Studies: At any stage of the program

Modality of the Internship: Exclusively face-to-face

Prior Experience Required: None

Language Required for the Internship: English or

Spanish

Length of the internship: 4 to 6 months

Internship availability: 1st (March-July) or 2nd

(August-December) semester

Virtual Reality for Human training and qualification

Supervisor's Full Name: Saul Emanuel Delabrida Silva

Area of study: Computing; Control and Automation Engineering.

Internship Description:

This project has undergraduate and graduate students involved. The goal is to evaluate how Virtual Reality can improve the learning process and how we can use virtual reality to provide inclusion of people in the industry and educational environments. The hosted students should collaborate with other local students from our lab on their projects. It is mandatory to have computer programming skills. Some abilities, such as Unity 3D programming, statistics analysis, statistics software manipulation, studies with humans, and web programming, are differential.

Level of Study: Undergraduate or Master's student

Term/Period of the Studies: At any stage of the program

Modality of the Internship: Exclusively face-to-face

Prior Experience Required: Computer programming

Language Required for the Internship: English

Length of the internship: 3 to 6 months

Internship availability: 1st (March-July) or 2nd (August-

December) semester



Singing For Actors/Body For Actor's Voices/ Diction And Singing/Classical Dramatic Texts/Contemporary Dramatic Texts

Supervisor's Full Name: Elisa Matilde Toledo Todd

Area of study: Theater, Music, Dance, Singing **Internship Description:**

Assistance No Voice Fr Actor's Classes.

Level of Study: Undergraduate or Master's student **Term/Period of the Studies:** At any stage of the program

Modality of the Internship: Exclusively face-to-face

Prior Experience Required: None

Language Required for the Internship: Portuguese

or Spanish

Length of the internship: 6 to 12 months

Internship availability: 1st (March-July) or 2nd

(August-December) semester



Characterization of Coordinated Behavior in Online Social Media

Supervisor's Full Name: Carlos Henrique Gomes Ferreira

Area of study: Computer Science, Computer Engineering, Information Systems, Electrical and Telecommunications Engineering

Internship Description:

During the research period, the intern will be immersed in activities centered around harnessing data science methodologies a graph-based techniques, to both model and analyze coordinated behaviors taking place within prevalent social media platforms like Telegram and WhatsApp. These behaviors will traverse diverse themes and contexts, encompassing the propagation of information, including disinformation, as well as strategic maneuvers aimed at influencing public opinion. Collaborating within a research consortium comprising esteemed faculty from numerous Brazilian and international institutions, including those from the United States and Italy, the intern will enjoy a rich academic environment.

Level of Study: Undergraduate or Master's student

Term/Period of the Studies: At any stage of the program

Modality of the Internship: Exclusively face-to-face

Prior Experience Required: Desirable experience for this position includes basic knowledge of Python, including data manipulation and graph plotting libraries, basic data structures, and graph concepts. The ability to understand scientific and academic literature is also a plus.

Language Required for the Internship: English

Length of the internship: 5 to 6 months

Internship availability: 1st (March-July) or 2nd (August-December)

semester



Synthesis of bioactive compounds

Supervisor's Full Name: Jason Guy Taylor

Area of study: Chemistry, Pharmacy **Internship Description:**

Carry out the synthesis and characterisation or organic compounds in the laboratory.

Level of Study: Undergraduate or Master's student Term/Period of the Studies: At any stage of the program

Modality of the Internship: Exclusively face-to-face

Prior Experience Required: Ter cursado aula prática de Química Orgânica

Language Required for the Internship: Portuguese
Length of the internship: 4 to 6 months
Internship availability: 1st (March-July) or 2nd
(August-December) semester
Number of Places/Positions Available: 1 place,

either for the 1st semester or the 2nd one

Research methodologies for radio studies: challenges for understanding the field

Supervisor's Full Name: Debora Cristina Lopez

Area of study: Communication **Internship Description:**

Developing and applying radio research methodologies; Discussing an epistemology of radio studies; Carrying out case studies and integrating them into the research project; Participating in meetings of the research group; Organizing and participating in scientific events; Integrating the research activities of the ConJor Research Group linked to the project.

Level of Study: Undergraduate or Master's student Term/Period of the Studies: At any stage of the program

Modality of the Internship: Face-to-face or remote/online

Prior Experience Required: None

Language Required for the Internship: English or

Spanish

Length of the internship: 1 to 6 months

Internship availability: 1st (March-July) or 2nd

(August-December) semester

Rock Mechanics Lab

Supervisor's Full Name: Tatiana Barreto Dos Santos

Area of study: Mining Engineering **Internship Description:**

Development of Best Practices in the Laboratory and Assistance (Calibration of GCTS Servo-Controlled Press for Soft Rock Testing, System for Physical Index Testing on Rocks, adaptation of Slake Durability Test for Rocks) and Scientific Article Writing.

Level of Study: Master's student

Term/Period of the Studies: At any stage of the

program

Modality of the Internship: Exclusively face-to-

face

Prior Experience Required: Geotechnics, rock mechanics, soil mechanics

Language Required for the Internship: English or Spanish

Length of the internship: 6 to 12 months

Internship availability: 2nd (August-December)

semester

Number of Places/Positions Available: 1 place for the 2nd semeste



Literatura Brasileira Moderna e Contemporânea

Supervisor's Full Name: Mônica Fernanda Rodrigues Gama

Area of study: Letras
Internship Description:

Estudo da literatura brasileira moderna e contemporânea; visitas a museus, cinema e teatro para estudo de cultura brasileira.

Level of Study: Undergraduate or Master's student Term/Period of the Studies: At any stage of the

program

Modality of the Internship: Exclusively face-to-face

Prior Experience Required: None

Language Required for the Internship:

Portuguese

Length of the internship: 1 to 4 months

Internship availability: 1st (March-July) or 2nd

(August-December) semester

Number of Places/Positions Available: 1 place,

either for the 1st semester or the 2nd one

A Marie

New catalysts from different biomasses for technological applications

Supervisor's Full Name: Liliane Catone Soares

Area of study: Chemistry, Chemical Engineering **Internship Description:**

Catalysis reactions for technological applications. Characterization of materials by chemical and spectroscopic analyses.

Other common chemistry laboratory activities such as solution preparation, waste management and laboratory organization.

Level of Study: Undergraduate or Master's student Term/Period of the Studies: In the middle or in the final years of the program

Modality of the Internship: Exclusively face-to-face

Prior Experience Required: None

Language Required for the Internship: English

Length of the internship: 3 to 6 months

Internship availability: 2nd (August-December)

semester

Number of Places/Positions Available: 1 place for the 2nd semester



Graph construction approaches for semisupervised learning algorithms

Supervisor's Full Name: Jadson Castro Gertrudes

Area of study: Computer Science; Computer Engineering; Control and Automation Engineering Internship Description:

The primary goal of this project is to assess various techniques for constructing graphs that can be incorporated into semi-supervised classification algorithms. By adopting and adapting different graph construction methods, our aim is to produce outcomes that are relevant and introduce a novel analytical tool for the analysis of complex multivariate data.

Level of Study: Undergraduate student

Term/Period of the Studies: In the middle of the program

Modality of the Internship: Exclusively face-to-face

Prior Experience Required: Machine learning;

unsupervised learning

Language Required for the Internship: English

Length of the internship: 5 to 6 months

Internship availability: 2nd (August-December)

semester

Number of Places/Positions Available: 1 place, either for the 1st semester or the 2nd one

Planejamento, programação e controle em sistemas produtivos: Análise e perspectivas em canteiros de obras

Supervisor's Full Name: Irce Fernandes Gomes Guimarães

Area of study: Production Engineering or Industrial Engineering **Internship Description:**

Projeto 1 - Revisão bibliográfica sobre simulação de eventos discretos em processos e metodologias apropriadas para o planejamento de leiaute de canteiro de obra durante as diferentes etapas do processo.

2) Estudo do planejamento do leiaute de canteiro de obra em uma situação real, a fim de adaptar os conceitos adquiridos nas pesquisas e resultados obtidos em estudos anteriores. 3) Desenvolvimento o modelo conceitual do planejamento do leiaute do canteiro por meio da conceituação do modelo e da coleta de dados. e 4) Validação do modelo conceitual, que é a atividade de garantir que o modelo computacional se comporta como o sistema real, sendo identificada alguma necessidade de modificação, retornar-se-á a etapa de conceituação do modelo e coleta de dados.}

Projeto 2 { revisões bibliográficas com foco nas palavras chaves: "filas virtuais", "filas" e implantação em hospitais públicos; Pesquisar e Analisar o tempo médio de espera dos pacientes nos hospitais públicos de Ouro Preto (MG); Implementar um sistema de triagem online para os casos não graves; 4º Verificar, interpretar e discutir os resultados};

Level of Study: Undergraduate or Master's student

Term/Period of the Studies: In the middle of the program

Modality of the Internship: Exclusively face-to-face

Prior Experience Required: None

Language Required for the Internship: Portuguese

Length of the internship: 5 to 6 months

Internship availability: 1st (March-July) or 2nd

(August-December) semester

Number of Places/Positions Available: Only 1, either for

the 1st semester or the 2nd one

Soil Electrical Parameter Monitoring and Control System for Irrigation

Supervisor's Full Name: Alan Kardek Rêgo Segundo

Area of study: Control and Automation Engineering, Electric Engineering, Computer Science or Agricultural Engineering Internship Description:

Software and hardware development Electronic system assembly Lab and field tests

Level of Study: Undergraduate or Master's student **Term/Period of the Studies:** In the middle or in the final years of the program

Modality of the Internship: Exclusively face-to-face Prior Experience Required: Electronics, instrumentation, programming and embedded

systems
Language Required for the Internship: English

Length of the internship: 2 to 6 months **Internship availability:** 1st (March-July) or 2nd

(August-December) semester



Consumo de alimentos y repercusiones en la salud: humana y planetaria

Supervisor's Full Name: Raquel de Deus Mendonça

Area of study: Nutrition; Public Health Internship Description:

Participar de proyectos en marcha, asignar valores a las diferencias culturales, monitorear reuniones semanales y algunas disciplinas que contribuyeron a la formación académica.

Level of Study: Undergraduate or Master's student **Term/Period of the Studies:** In the middle or in the final years of the program

Modality of the Internship: Exclusively face-to-face

Prior Experience Required: None

Language Required for the Internship: Spanish

Length of the internship: 4 to 6 months

Internship availability: 1st (March-July) or 2nd

(August-December) semester