Postgraduate Diploma

Image Analysis with Artificial Intelligence for Medical Diagnosis

tech global university

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Postgraduate Diploma

Image Analysis with Artificial Intelligence for Medical Diagnosis

- Modality: **online**
- Duration: **6 months**
- Certificate: **TECH Global University**
- Accreditation: **18 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Website: **www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-image-analysis-artificial-intelligence-medical-diagnosis**

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01

Introduction

The arrival of Industry 4.0 has had a significant impact on the field of Medical Diagnostics, providing cutting-edge Artificial Intelligence tools to significantly improve clinical decision making. For example, the use of Convolutional Neural Networks allows specialists to detect complex clinical data patterns to identify early on serious pathologies such as Heart Failure, Alzheimer's and even Cancer. However, to enjoy the benefits of these tools, practitioners need to acquire advanced clinical skills to handle them efficiently. In this context, TECH presents a university program focused on the latest advances in Image Analysis with Artificial Intelligence. At the same time, it is taught in a convenient 100% online mode.

Thanks to this 100% online Postgraduate Diploma, you will handle the most innovative techniques of Artificial Intelligence to increase the accuracy of imaging findings and optimize clinical diagnoses"

A recent report by the World Health Organization highlights that the use of Artificial Intelligence in the healthcare field has allowed optimizing the early detection rate of Breast Cancer Tumors by 95%. This fact highlights the potential of these emerging technologies for the early detection of a wide range of pathologies. Therefore, it is important that professionals update their knowledge regularly to incorporate the latest advances in techniques such as Machine Learning into their clinical practice. Only in this way will experts be able to increase the accuracy of their clinical diagnoses and design the most appropriate individualized treatments to ensure optimal patient recovery.

In order to facilitate this task, TECH has created a pioneering program in Image Analysis with Artificial Intelligence for Medical Diagnosis. Conceived by references in this field, the academic itinerary will focus on aspects ranging from the use of Deep Learning in Radiology or the development of graphic interfaces for the exploration of 3D images to Natural Language Processing with Nuance PowerScribe 360. In this way, graduates will develop advanced clinical skills to employ algorithms in Biomedical Imaging to detect subtle features. In addition, the course materials will analyze the most effective simulation and computational modeling techniques for planning complex surgical procedures.

In terms of methodology, TECH provides a 100% online environment that adapts to the needs of busy physicians looking to experience a leap in quality in their professional careers. In addition, it employs its disruptive Relearning system, based on the reiteration of key concepts to facilitate the updating of knowledge. In this sense, the only thing graduates will need is an electronic device with an Internet connection to access the Virtual Campus. There they will find a library of different multimedia resources such as explanatory videos, specialized readings or interactive summaries.

This **Postgraduate Diploma in Image Analysis with Artificial Intelligence for Medical Diagnosis** contains the most complete and up-to-date scientific program on the market. The most important features include:

- Development of practical cases presented by experts in Artificial Intelligence
- The graphic, schematic and eminently practical contents with which it is conceived gather scientific and practical information on those disciplines that are indispensable for professional practice
- Practical exercises where self-assessment can be used to improve learning
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Content that is accessible from any fixed or portable device with an Internet connection

This program gives you the opportunity to update your knowledge in a real scenario, with the maximum scientific rigor of an institution at the forefront of technology"

You will gain profound knowledge in the process of Data Mining with Radiomics, which will allow you to identify risk factors that manifest the probability of developing pathologies such as Diabetes"

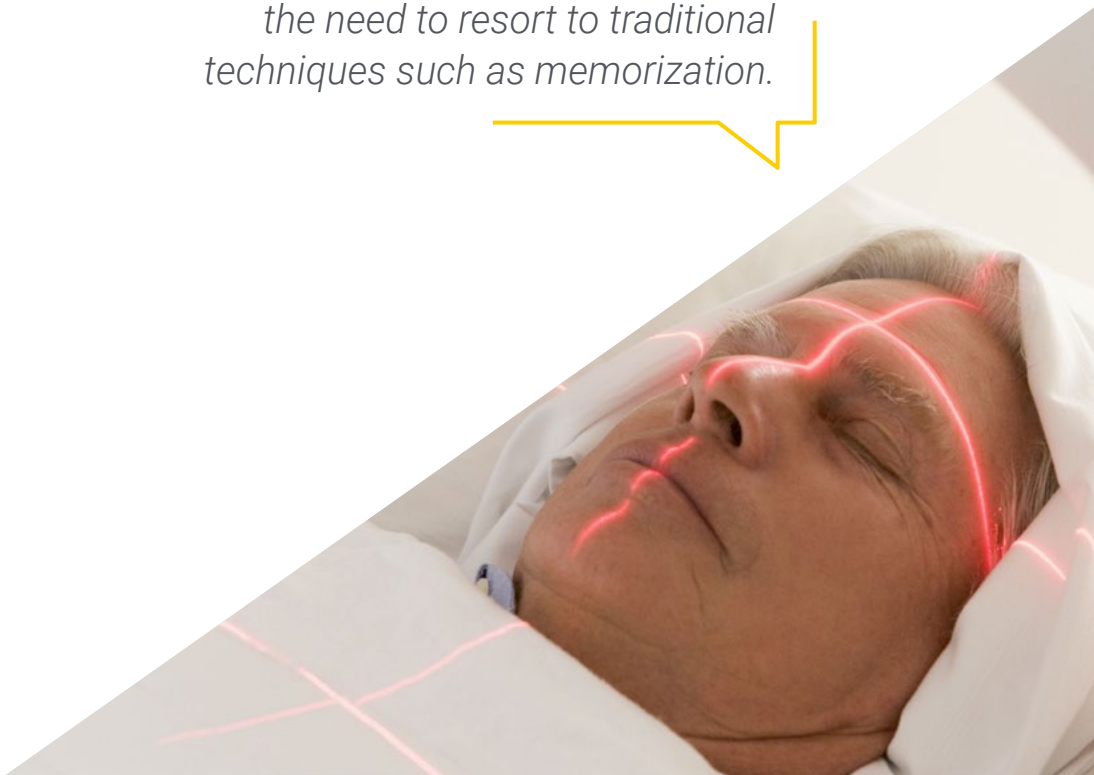
Are you looking to incorporate state-of-the-art methods to reduce noise in imaging tests into your daily clinical practice? Achieve it through this university program.

With TECH's revolutionary Relearning methodology, you will integrate all the knowledge in an optimal way without the need to resort to traditional techniques such as memorization.

The program's teaching staff includes professionals from the field who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive education programmed to learn in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the course. For this purpose, students will be assisted by an innovative interactive video system created by renowned and experienced experts.



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Objectives

Through this Postgraduate Diploma, professionals will have a holistic understanding of the applications of Artificial Intelligence to improve the interpretation of images and make clinical decisions based on data. In this sense, specialists will acquire advanced skills to handle disruptive techniques such as Deep Learning, Convolutional Neural Networks and Natural Language Processing. In this way, physicians will extract valuable information from imaging tests to identify abnormal features such as tumors. Therefore, they will be able to detect early a variety of pathologies (among which Cardiac Arrhythmias stand out) and personalize treatments to significantly optimize clinical outcomes.

You will handle the most sophisticated Biomedical Image Processing techniques to detect Neurodegenerative Diseases before conditions worsen"

General Objectives

- Understand the theoretical foundations of Artificial Intelligence
- Study the different types of data and understand the data life cycle
- Evaluate the crucial role of data in the development and implementation of AI solutions
- Delve into algorithms and complexity to solve specific problems
- Explore the theoretical basis of neural networks for Deep Learning development
- Explore bio-inspired computing and its relevance in the development of intelligent systems
- Develop skills to use and apply advanced Artificial Intelligence tools in the interpretation and analysis of medical images, improving diagnostic accuracy
- Implement Artificial Intelligence solutions that allow the automation of processes and the personalization of diagnostics
- Apply Data Mining and Predictive Analytics techniques to make evidence-based clinical decisions
- Acquire research skills that allow experts to contribute to the advancement of Artificial Intelligence in Medical Imaging

Specific Objectives

Module 1. Artificial Intelligence Innovations in Diagnostic Imaging

- Master tools such as IBM Watson Imaging and NVIDIA Clara to automatically interpret clinical tests
- Gain competencies to perform clinical experiments and results analysis using Artificial Intelligence, with an approach based on improving diagnostic accuracy

Module 2. Advanced Applications of Artificial Intelligence in Medical Imaging Studies and Analysis

- Execute observational studies in imaging using Artificial Intelligence, validating and calibrating the models efficiently
- Integrate medical imaging data with other biomedical sources, using tools such as Enlitic Curie to conduct multidisciplinary research

Module 3. Personalization and Automation in Medical Diagnostics using Artificial Intelligence

- Acquire skills to personalize diagnoses using Artificial Intelligence, correlating imaging findings with genomic and other biomarker data
- Master automation in medical image acquisition and processing, applying advanced Artificial Intelligence technologies

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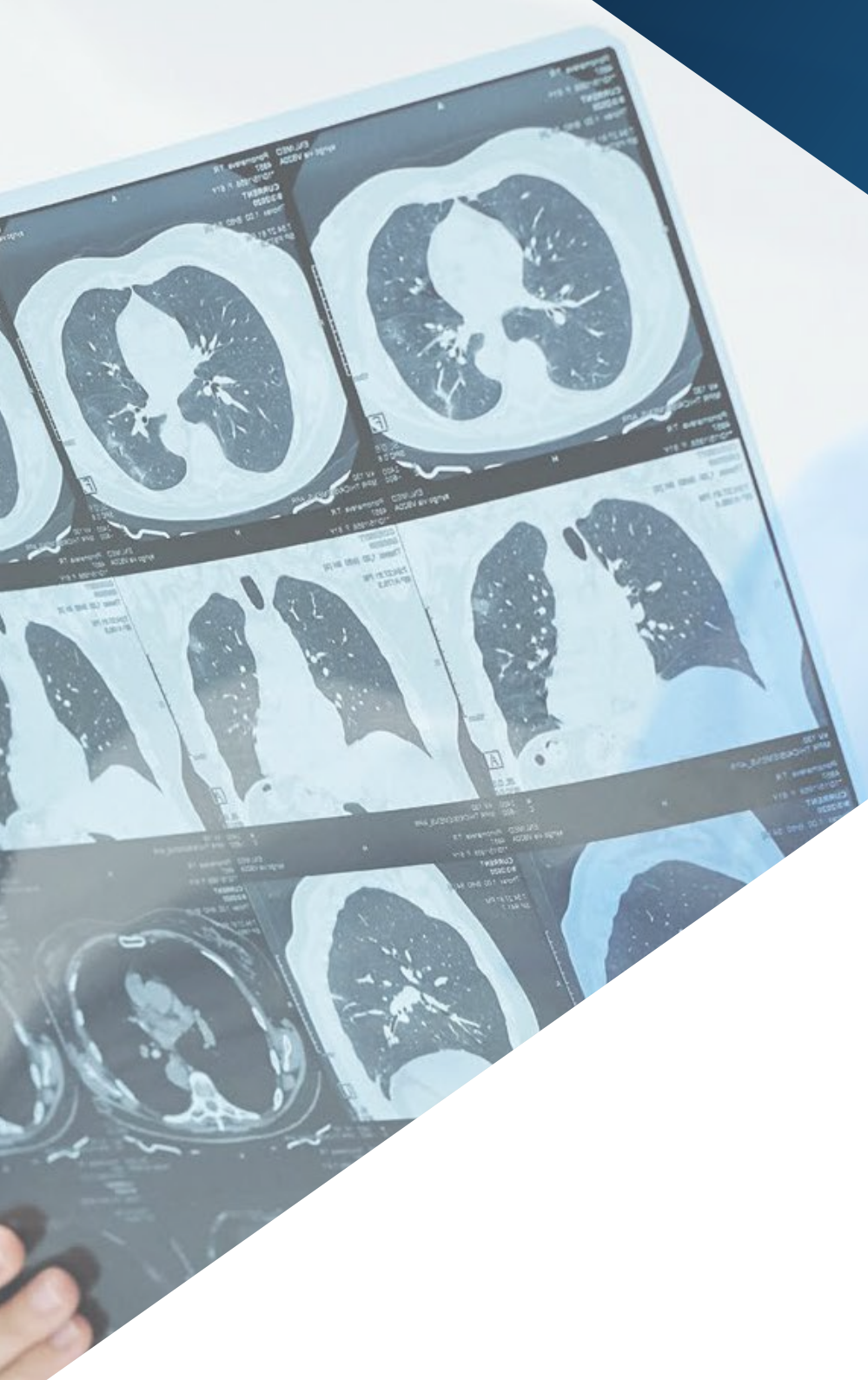
Course Management

TECH's philosophy is based on providing the most complete and updated university program in the academic panorama, which is why it carries out a meticulous process to form its teaching staff. Thanks to this, the present Postgraduate Diploma has the participation of prestigious specialists in the field of Image Analysis with Artificial Intelligence for Medical Diagnosis. These professionals have an extensive working background, where they have contributed to optimize the quality of life of many people. Therefore, graduates have the guarantees they demand to enter into an immersive experience that will allow them to improve their daily clinical practice.



You will have access to a study plan designed by recognized experts in the field of Image Analysis with Artificial Intelligence for Medical Diagnosis"

Management

Dr. Peralta Martín-Palomino, Arturo

- CEO and CTO at Prometeus Global Solutions
- CTO at Korporate Technologies
- CTO at AI Shephers GmbH
- Consultant and Strategic Business Advisor at Alliance Medical
- Director of Design and Development at DocPath
- PhD. in Psychology from the University of Castilla La Mancha
- PhD in Economics, Business and Finance from the Camilo José Cela University
- PhD in Psychology from University of Castilla La Mancha
- Máster in Executive MBA por la Universidad Isabel I
- Master's Degree in Sales and Marketing Management, Isabel I University
- Expert Master's Degree in Big Data by Hadoop Training
- Master's Degree in Advanced Information Technologies from the University of Castilla La Mancha
- Member of: SMILE Research Group

Professors

Mr. Popescu Radu, Daniel Vasile

- Independent Specialist in Pharmacology, Nutrition and Dietetics
- Freelance Producer of Teaching and Scientific Content
- Nutritionist and Community Dietitian
- Community Pharmacist
- Researcher
- Master's Degree in Nutrition and Health at the Open University of Catalonia
- Master's Degree in Psychopharmacology from the University of Valencia
- Pharmacist from the Complutense University of Madrid
- Nutritionist-Dietitian by the European University Miguel de Cervantes

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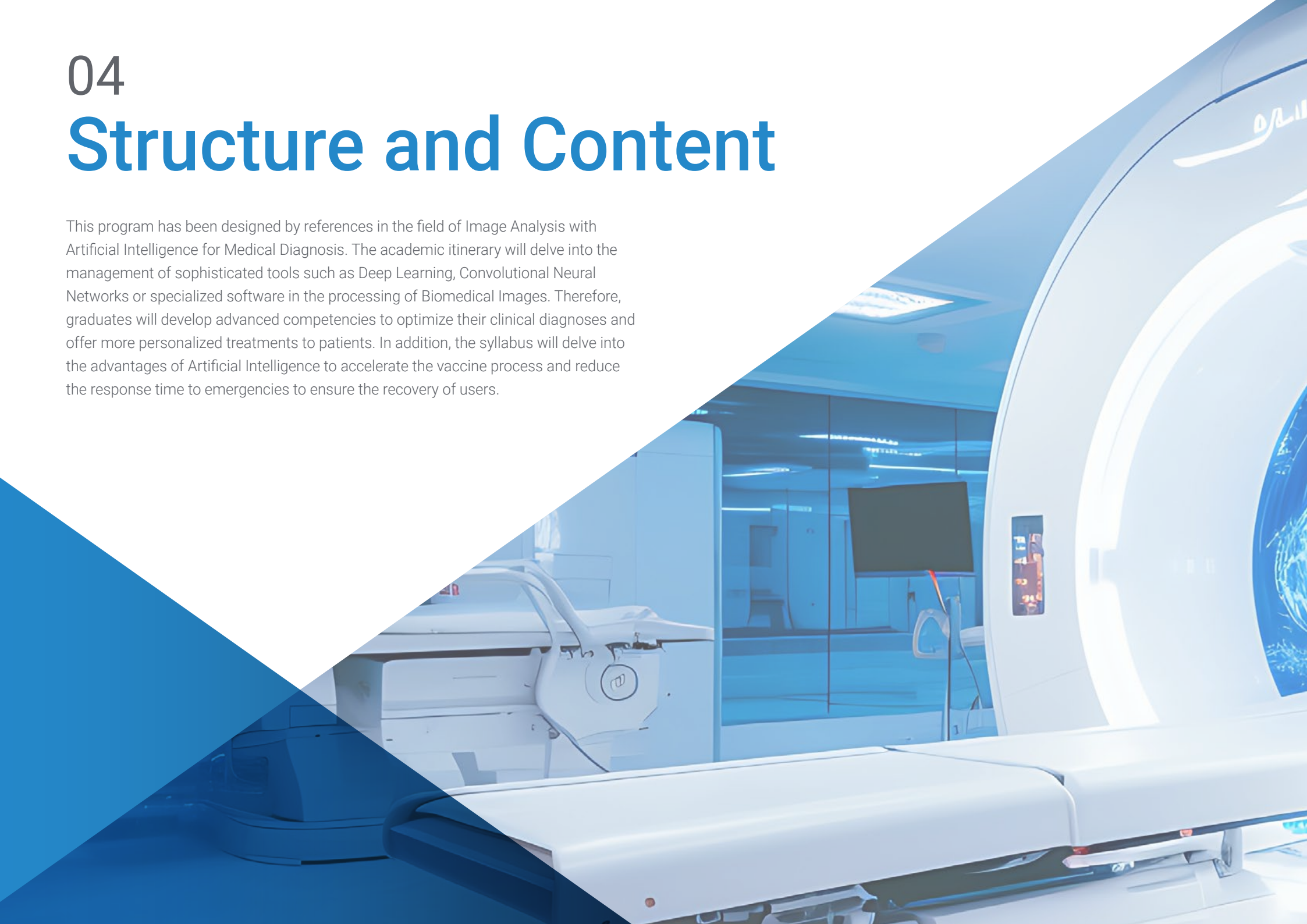
Structure and Content

This program has been designed by references in the field of Image Analysis with Artificial Intelligence for Medical Diagnosis. The academic itinerary will delve into the management of sophisticated tools such as Deep Learning, Convolutional Neural Networks or specialized software in the processing of Biomedical Images. Therefore, graduates will develop advanced competencies to optimize their clinical diagnoses and offer more personalized treatments to patients. In addition, the syllabus will delve into the advantages of Artificial Intelligence to accelerate the vaccine process and reduce the response time to emergencies to ensure the recovery of users.



You will make the earliest and most accurate clinical diagnoses thanks to the predictive capabilities of Artificial Intelligence"

Module 1. Artificial Intelligence Innovations in Diagnostic Imaging

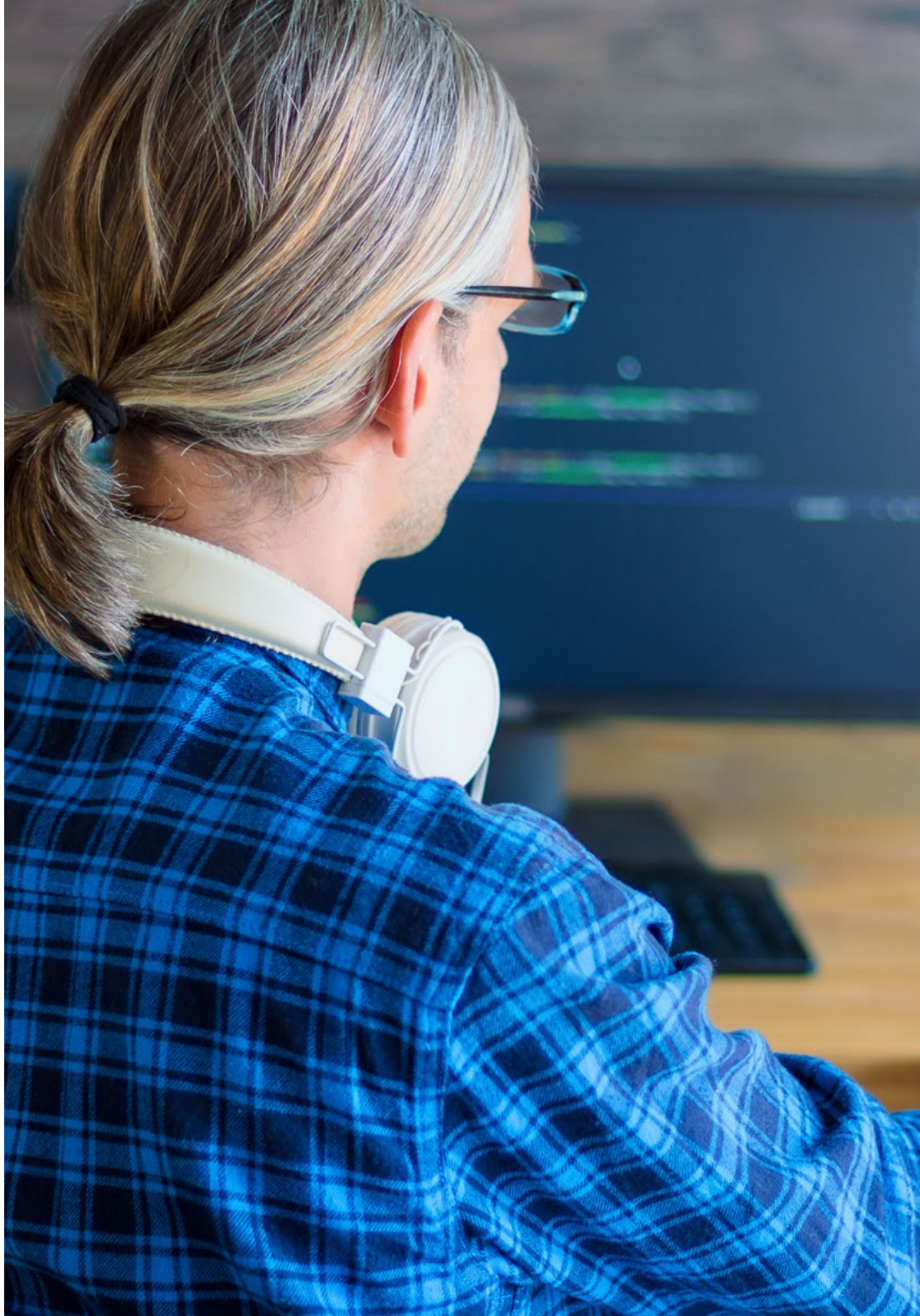
1.1. Artificial Intelligence Technologies and Tools in Diagnostic Imaging with IBM Watson Imaging Clinical Review
- 1.1.1. Leading Software Platforms for Medical Image Analysis
- 1.1.2. Radiology-Specific Deep Learning Tools
- 1.1.3. Innovations in Hardware to Accelerate Image Processing
- 1.1.4. Integration of Artificial Intelligence Systems in Existing Hospital Infrastructures

1.2. Statistical Methods and Algorithms for Medical Image Interpretation with DeepMind AI for Breast Cancer Analysis
- 1.2.1. Image Segmentation Algorithms
- 1.2.2. Classification and Detection Techniques in Medical Images
- 1.2.3. Use of Convolutional Neural Networks in Radiology
- 1.2.4. Noise Reduction and Image Quality Improvement Methods

1.3. Design of Experiments and Analysis of Results in Diagnostic Imaging with Google Cloud Healthcare API
- 1.3.1. Design of Validation Protocols for Artificial Intelligence Algorithms
- 1.3.2. Statistical Methods for Comparing the Performance of Artificial Intelligence and Radiologists
- 1.3.3. Setting Up Multicenter Studies for Artificial Intelligence Testing
- 1.3.4. Interpretation and Presentation of Performance Test Results

1.4. Detection of Subtle Patterns in Low-Resolution Images
- 1.4.1. Artificial Intelligence for Early Diagnosis of Neurodegenerative Diseases
- 1.4.2. Artificial Intelligence Applications in Interventional Cardiology
- 1.4.3. Use of Artificial Intelligence for the Optimization of Imaging Protocols

1.5. Biomedical Image Analysis and Processing
- 1.5.1. Pre-Processing Techniques to Improve Automatic Interpretation
- 1.5.2. Texture and Pattern Analysis in Histological Images
- 1.5.3. Extraction of Clinical Features from Ultrasound Images
- 1.5.4. Methods for Longitudinal Analysis of Images in Clinical Studies



1.6. Advanced Data Visualization in Diagnostic Imaging with OsiriX MD
- 1.6.1. Development of Graphical Interfaces for 3D Image Exploration
- 1.6.2. Tools for Visualization of Temporal Changes in Medical Images
- 1.6.3. Augmented Reality Techniques for the Teaching of Anatomy
- 1.6.4. Real-Time Visualization Systems for Surgical Procedures

1.7. Natural Language Processing in Medical Image Documentation and Reporting with Nuance PowerScribe 360
- 1.7.1. Automatic Generation of Radiological Reports
- 1.7.2. Extraction of Relevant Information from Electronic Medical Records
- 1.7.3. Semantic Analysis for the Correlation of Imaging and Clinical Findings
- 1.7.4. Image Search and Retrieval Tools Based on Textual Descriptions

1.8. Integration and Processing of Heterogeneous Data in Medical Imaging
- 1.8.1. Fusion of Imaging Modalities for Complete Diagnostics
- 1.8.2. Integration of Laboratory and Genetic Data in the Image Analysis
- 1.8.3. Systems for Handling Large Volumes of Imaging Data
- 1.8.4. Strategies for Normalization of Datasets from Multiple Sources

1.9. Applications of Neural Networks in Medical Image Interpretation with Zebra Medical Vision
- 1.9.1. Use of Generative Networks for the Creation of Synthetic Medical Images
- 1.9.2. Neural Networks for Automatic Tumor Classification
- 1.9.3. Deep Learning for the Analysis of Time Series in Functional Imaging
- 1.9.4. Fitting of Pre-Trained Models on Specific Medical Image Datasets

1.10. Predictive Modeling and its Impact on Diagnostic Imaging with IBM Watson Oncology
- 1.10.1. Predictive Models for Risk Assessment in Oncology Patients
- 1.10.2. Predictive Tools for Chronic Disease Follow-Up
- 1.10.3. Survival Analysis Using Medical Imaging Data
- 1.10.4. Prediction of Disease Progression using Machine Learning Techniques

Module 2. Advanced AI Applications in Medical Imaging Studies and Analysis

2.1. Design and Execution of Observational Studies using Artificial Intelligence in Medical Imaging with Flatiron Health
- 2.1.1. Criteria for the Selection of Populations in Artificial Intelligence Observational Studies
- 2.1.2. Methods for Controlling Confounding Variables in Imaging Studies
- 2.1.3. Strategies for Long-Term Follow-Up in Observational Studies
- 2.1.4. Analysis of Results and Validation of Artificial Intelligence Models in Real Clinical Settings

2.2. Validation and Calibration of AI Models in Image Interpretation with Arterys Cardio AI
- 2.2.1. Cross-Validation Techniques Applied to Diagnostic Imaging Models
- 2.2.2. Methods for Probability Calibration in AI Predictions
- 2.2.3. Performance Standards and Accuracy Metrics for AI Evaluation
- 2.2.4. Implementation of Robustness Testing in Different Populations and Conditions

2.3. Methods of Integrating Imaging Data with other Biomedical Sources
- 2.3.1. Data Fusion Techniques to Improve Image Interpretation
- 2.3.2. Joint Analysis of Images and Genomic Data for Accurate Diagnoses
- 2.3.3. Integration of Clinical and Laboratory Information in Artificial Intelligence Systems
- 2.3.4. Development of User Interfaces for Integrated Visualization of Multidisciplinary Data

2.4. Use of Medical Imaging Data in Multidisciplinary Research with Enlitic Curie
- 2.4.1. Interdisciplinary Collaboration for Advanced Image Analysis
- 2.4.2. Application of Artificial Intelligence Techniques from other Fields in Diagnostic Imaging
- 2.4.3. Challenges and Solutions in the Management of Large and Heterogeneous Data
- 2.4.4. Case Studies of Successful Multidisciplinary Applications

2.5. Specific Deep Learning Algorithms for Medical Imaging with Aidoc
- 2.5.1. Development of Image-Specific Neural Network Architectures
- 2.5.2. Optimization of Hyperparameters for Medical Imaging Models
- 2.5.3. Transfer of Learning and its Applicability in Radiology

2.6. Challenges in the Interpretation and Visualization of Features Learned by Deep Models
- 2.6.1. Optimization of the Interpretation of Medical Images by Automation with Viz.ai
- 2.6.2. Automation of Diagnostic Routines for Operational Efficiency
- 2.6.3. Early Warning Systems for Anomaly Detection
- 2.6.4. Reduction of Radiologists' Workload through Artificial Intelligence Tools
- 2.6.5. Impact of Automation on the Accuracy and Speed of Diagnostics

2.7. Simulation and Computational Modeling in Diagnostic Imaging
- 2.7.1. Simulations for Training and Validation of Artificial Intelligence Algorithms
- 2.7.2. Modeling of Diseases and their Representation in Synthetic Images
- 2.7.3. Use of Simulations for Treatment and Surgery Planning
- 2.7.4. Advances in Computational Techniques for Real-Time Image Processing

2.8. Virtual and Augmented Reality in Medical Image Visualization and Analysis
- 2.8.1. Virtual Reality Applications for Diagnostic Imaging Education
- 2.8.2. Use of Augmented Reality in Image-Guided Surgical Procedures
- 2.8.3. Advanced Visualization Tools for Therapeutic Planning
- 2.8.4. Development of Immersive Interfaces for the Review of Radiological Studies

2.9. Data Mining Tools Applied to Diagnostic Imaging with Radiomics
- 2.9.1. Techniques for Data Mining of Large Medical Image Repositories
- 2.9.2. Pattern Analysis Applications for Image Data Collections
- 2.9.3. Biomarker Identification through Image Data Mining
- 2.9.4. Integration of Data Mining and Machine Learning for Clinical Discovery

2.10. Development and Validation of Biomarkers using Image Analysis with Oncimmune
- 2.10.1. Strategies to Identify Imaging Biomarkers in Various Diseases
- 2.10.2. Clinical Validation of Imaging Biomarkers for Diagnostic Use
- 2.10.3. Impact of Imaging Biomarkers on Treatment Personalization
- 2.10.4. Emerging Technologies in the Detection and Analysis of Biomarkers through Artificial Intelligence

Module 3. Personalization and Automation in Medical Diagnosis through Artificial Intelligence

3.1. Application of Artificial Intelligence in Genomic Sequencing and Correlation with Imaging Findings using Fabric Genomics
- 3.1.1. Artificial Intelligence Techniques for the Integration of Genomic and Imaging Data
- 3.1.2. Predictive Models to Correlate Genetic Variants with Pathologies Visible in Images
- 3.1.3. Development of Algorithms for the Automatic Analysis of Sequences and their Representation in Images
- 3.1.4. Case Studies on the Clinical Impact of Genomics-Imaging Fusion

3.2. Advances in Artificial Intelligence for the Detailed Analysis of Biomedical Images with PathAI
- 3.2.1. Innovations in Image Processing and Analysis Techniques at the Cellular Level
- 3.2.2. Application of Artificial Intelligence for Resolution Enhancement in Microscopy Images
- 3.2.3. Deep Learning Algorithms Specialized in the Detection of Submicroscopic Patterns
- 3.2.4. Impact of Advances in Artificial Intelligence on Biomedical Research and Clinical Diagnosis

3.3. Automation in Medical Image Acquisition and Processing with Butterfly Network
- 3.3.1. Automated Systems for the Optimization of Image Acquisition Parameters
- 3.3.2. Artificial Intelligence in the Management and Maintenance of Imaging Equipment
- 3.3.3. Algorithms for Real-Time Processing of Images during Medical Procedures
- 3.3.4. Successful Cases in the Implementation of Automated Systems in Hospitals and Clinics

3.4. Personalization of Diagnoses using Artificial Intelligence and Precision Medicine with Tempus AI
- 3.4.1. Artificial Intelligence Models for Personalized Diagnostics Based on Genetic and Imaging Profiles
- 3.4.2. Strategies for the Integration of Clinical and Imaging Data in Therapeutic Planning
- 3.4.3. Impact of Precision Medicine on Clinical Outcomes Via AI
- 3.4.4. Ethical and Practical Challenges in Implementing Personalized Medicine

3.5. Innovations in AI-Assisted Diagnostics with Caption Health
- 3.5.1. Development of New Artificial Intelligence Tools for the Early Detection of Diseases
- 3.5.2. Advances in Artificial Intelligence Algorithms for the Interpretation of Complex Pathologies
- 3.5.3. Integration of AI-Assisted Diagnostics in Routine Clinical Practice
- 3.5.4. Evaluation of the Effectiveness and Acceptance of Diagnostic Artificial Intelligence by Healthcare Professionals

3.6. Applications of Artificial Intelligence in Microbiome Image Analysis with DayTwo AI
- 3.6.1. Artificial Intelligence Techniques for Image Analysis in Microbiome Studies
- 3.6.2. Correlation of Microbiome Imaging Data with Health Indicators
- 3.6.3. Impact of Microbiome Findings on Therapeutic Decisions
- 3.6.4. Challenges in the Standardization and Validation of Microbiome Imaging

3.7. Use of Wearables to Improve the Interpretation of Diagnostic Images with AliveCor
- 3.7.1. Integration of Wearable Data with Medical Images for Complete Diagnostics
- 3.7.2. AI Algorithms for the Analysis of Continuous Data and its Representation in Images
- 3.7.3. Technological Innovations in Wearable Devices for Health Monitoring
- 3.7.4. Case Studies on Improving Quality of Life Through Wearables and Imaging Diagnostics

3.8. Management of Diagnostic Imaging Data in Clinical Trials using Artificial Intelligence
- 3.8.1. AI Tools for the Efficient Management of Large Volumes of Image Data
- 3.8.2. Strategies to Ensure the Quality and Integrity of Data in Multicenter Studies
- 3.8.3. Artificial Intelligence Applications for Predictive Analytics in Clinical Trials
- 3.8.4. Challenges and Opportunities in the Standardization of Imaging Protocols in Global Trials

3.9. Development of Treatments and Vaccines Assisted by Advanced AI Diagnostics
- 3.9.1. Use of Artificial Intelligence to Design Personalized Treatments Based on Imaging and Clinical Data
- 3.9.2. Artificial Intelligence Models in the Accelerated Development of Vaccines Supported by Diagnostic Imaging
- 3.9.3. Evaluation of the Effectiveness of Treatments by Means of Image Monitoring
- 3.9.4. Impact of Artificial Intelligence in the Reduction of Time and Costs in the Development of New Therapies

3.10. AI Applications in Immunology and Immune Response Studies with ImmunoMind
- 3.10.1. AI Models for the Interpretation of Images Related to the Immune Response
- 3.10.2. Integration of Imaging Data and Immunological Analysis for Accurate Diagnosis
- 3.10.3. Development of Imaging Biomarkers for Autoimmune Diseases
- 3.10.4. Advances in the Personalization of Immunological Treatments through the Use of Artificial Intelligence

05

Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning.**

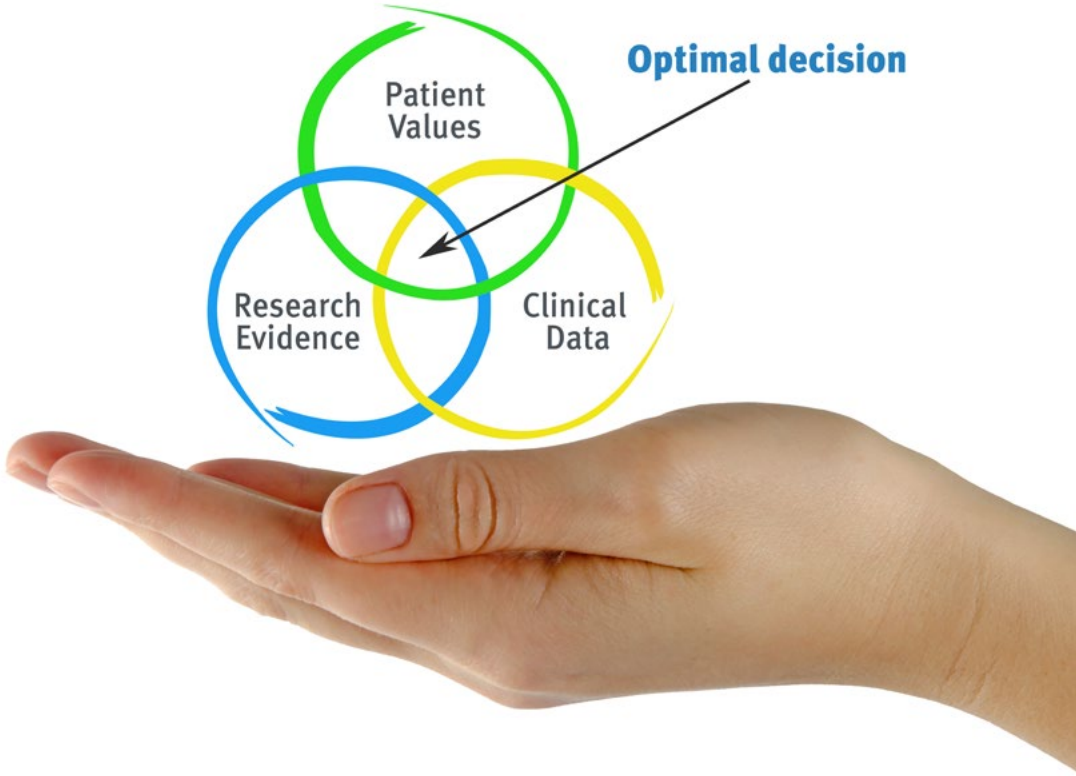
This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

At TECH we use the Case Method

What should a professional do in a given situation? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

With TECH you will experience a way of learning that is shaking the foundations of traditional universities around the world.



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions in the physician's professional practice.

Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method"

The effectiveness of the method is justified by four fundamental achievements:

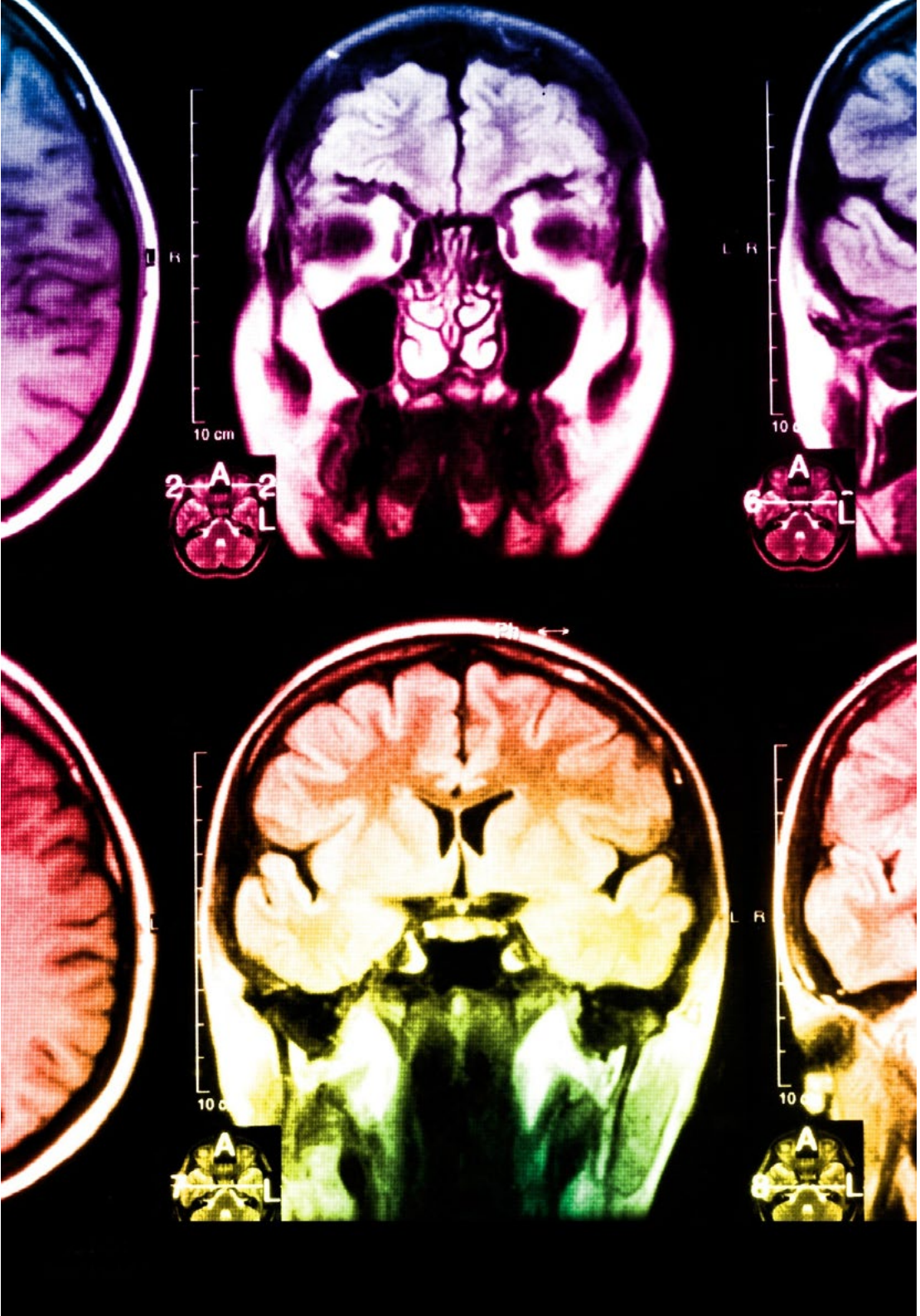
1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.

Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This university is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.

Professionals will learn through real cases and by resolving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.



At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology, more than 250,000 physicians have been trained with unprecedented success in all clinical specialties regardless of surgical load. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by TECH's learning system is 8.01, according to the highest international standards.

This program offers the best educational material, prepared with professionals in mind:

Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.

Surgical Techniques and Procedures on Video

TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times as you like.

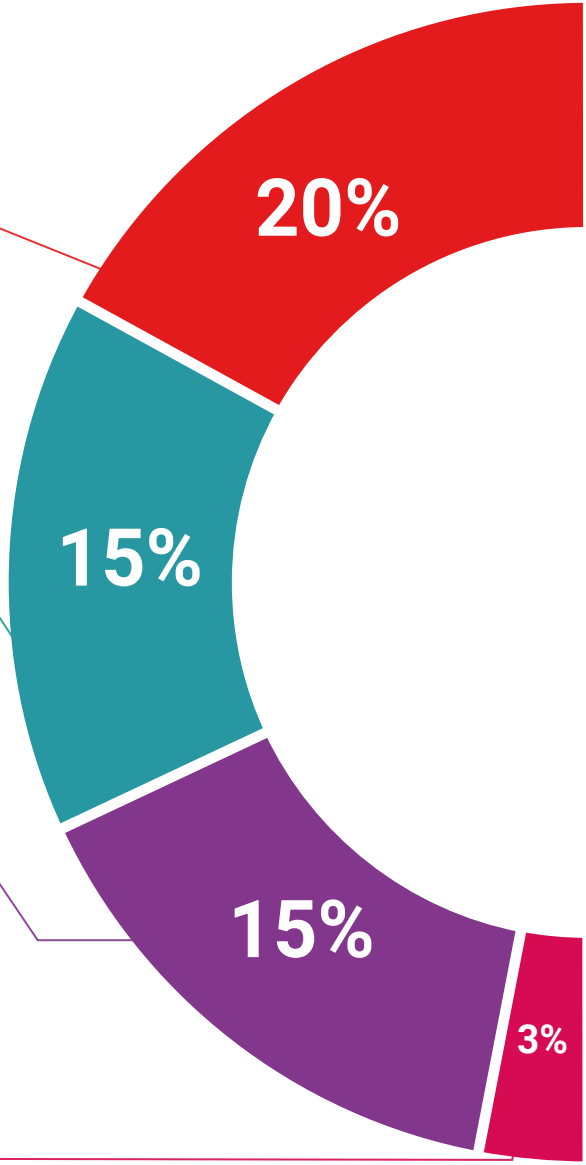
Interactive Summaries

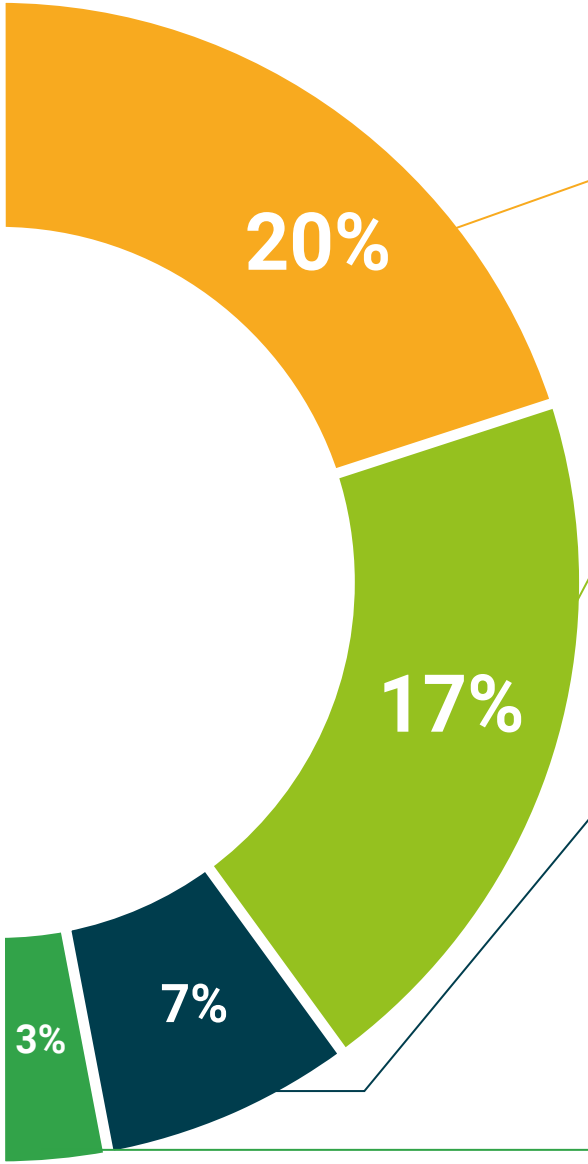
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".

Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.

Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.

Classes

There is scientific evidence on the usefulness of learning by observing experts. The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.

06

Certificate

This Postgraduate Diploma in Image Analysis with Artificial Intelligence for Medical Diagnosis guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Global University.

Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork"

This private qualification will allow you to obtain a **Postgraduate Diploma in Image Analysis with Artificial Intelligence for Medical Diagnosis** endorsed by **TECH Global University**, the world's largest online university.

TECH Global University is an official European University publicly recognized by the Government of Andorra (***official bulletin***). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

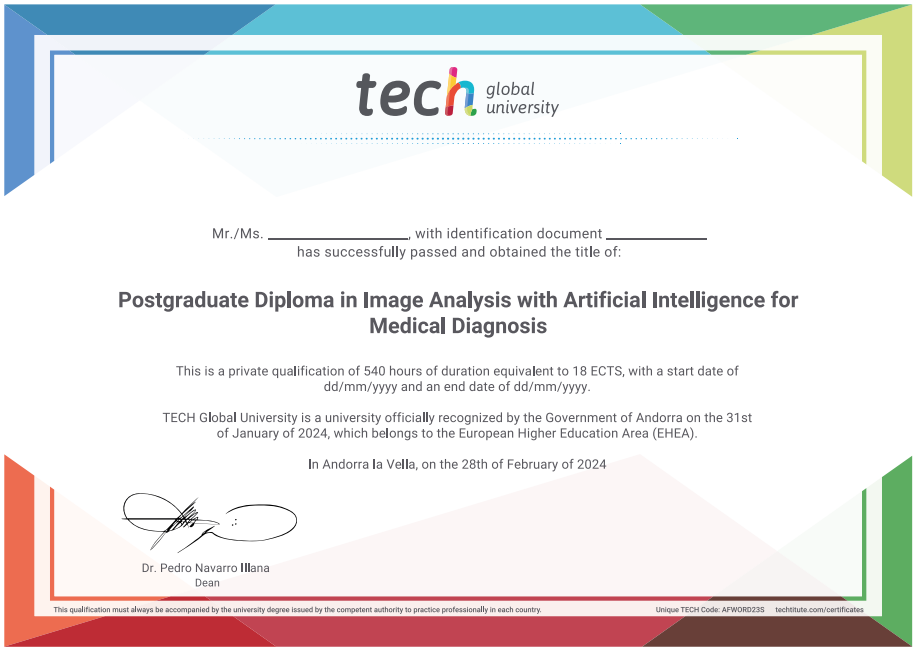
This **TECH Global University** private qualification is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Diploma in Image Analysis with Artificial Intelligence for Medical Diagnosis**

Modality: **online**

Duration: **6 months**

Accreditation: **18 ECTS**


tech global university

Mr./Ms. _____, with identification document _____
has successfully passed and obtained the title of:

Postgraduate Diploma in Image Analysis with Artificial Intelligence for Medical Diagnosis

This is a private qualification of 540 hours of duration equivalent to 18 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024

Dr. Pedro Navarro Illana
Dean

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. Unique TECH Code: AFWORD23S techtitute.com/certificates

*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH Global University will make the necessary arrangements to obtain it, at an additional cost.

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Postgraduate Diploma

Image Analysis with Artificial Intelligence for Medical Diagnosis

- Modality: **online**
- Duration: **6 months**
- Certificate: **TECH Global University**
- Accreditation: **18 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Postgraduate Diploma

Image Analysis with Artificial Intelligence for Medical Diagnosis

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