



The University of Pau and Pays de l'Adour recruits an IT engineer for the European University «UNITA Universitas Montium»

Full-time recruitment

Position to be filled: March 2021

Overall role

The expert will take the role of solution architect - leading the practice and introducing the overall technical vision for an advanced LMS solution dedicated for UNITA.

Main responsibilities:

- Analyzing technology environment dedicated and used within Higher education institutions
- Analyzing and deciding enterprise specifics
- Analyzing requirements, setting collaboration framework
- Creating a solution MVP
- Project management support related to the work package

Responsibilities

Collaborate with other professionals to determine functional and non-functional requirements for new software or applications

- Use tools and methodologies to create representations for functions and user interface of desired product
- Develop high-level product specifications with attention to system integration and feasibility
- Define all aspects of development from appropriate technology and workflow to coding standards
- Successfully communicate all concepts and guidelines to development team
- Oversee progress of development team to ensure consistency with initial design
- Provide technical guidance and coaching to developers and engineers

Ensure software meets all requirements of quality, security, modifiability, extensibility etc.

Context and mission:

The University of Pau and Pays de l'Adour (UPPA) is a multidisciplinary university which covers three major areas of study: law, economics, business, management; science and technology; literature, languages, arts, social sciences and humanities and sport.

UPPA is one of the founding members of the European University UNITA. The UNITA Alliance intends to build a fully-fledged European inter-university campus based on excellent teaching and learning, research and innovation, and on civic engagement. For more information on UNITA: http://univ-unita.eu/

This involves the creation of an Inter-University Campus, digital and physical. On the Web, step by step, it is becoming the unique entry-point for UNITA students and for anybody interested in UNITA activities, resources produced, etc. This inter-campus will also contribute to developing a sense of belonging to UNITA.

In this context, the person recruited will have the mission to coordinate the deployment of a digital platform and the implementation of an European Students Card for all students involved in the UNITA program. Under the supervision of the UVT (Universitatea de Vest din Timisoara, Romania), which is in charge of the work-package associated to this mission, she/he will conduct the following tasks:

- Deployment of a digital platform for an inspiring campus. The platform is planned to include
 e-learning facilities, student information system, course catalog, etc. Th recruited engineer will
 have the following missions: benchmark on platforms deployed in higher education and
 research entities; benchmark on hosting; study on infra or SaaS; support process
 implementation
- Deployment of a smartphone app
- Deployment of the European Student Card

Profile:

Technical skills

1-Must have!

- Minimum 5 years experience in working with databases, front-end and back-end technologies
- Experience regarding the design of software applications and their specific tools and methodologies
- Experience with educational and /or logistical ERP or CRM applications, LMS platforms
- Experience with cloud solutions with a web-based storage system
- Core academic tools would include, among other features:
 - o Restore/backup
 - Assessment engine
 - Learning tools interoperability (LTI)
- The application-general subsystems, which will be re-used in different applications, will be (but not limiting to):
 - Communication management (E-mail, Chat, Discussion forum, Audio/videoconferencing, Announcements, Synchronous collaborative facilities such as whiteboard, desktop, file and application sharing)
 - File management (FTP server and client)
 - Content packaging
 - Business objects management (connection with database, persistent object factory)
 - Metadata management
 - Raw data management
 - Database client
- Ability to design and coordinate an application-specific sub-system of the layered architecture, which are the top-level components of the application, with:
 - o Main subsystem (master component that initializes and launches everything else)
 - User management (enrollment/registration, in courses and in groups, groups creation and allocation, SSO, user access control, student educational tracking and profile management)
 - Courseware delivery
 - Experience with System Administration (ex. courses, back up, security, systems operation check, resource monitoring etc.)
 - o Experience with Help desk systems (on-line help, user support)

2-Strongly desired:

- Experience in developing new software-as-a-service applications, used in the reengineering of existing legacy systems / Learning Management Systems (LMS)
- Experience with SAAS ecosystems, easily integrated with others (well-documented API/modular structure)
- Experience with development, testing and deploy platforms scalable across tablets and smartphones
- Ability to effectively coordinate the development and deployment of a Learning Management System in order to:
 - o Create, operate and administrate an on-line course.
 - Support the collaboration between students.
 - Coordinate the administration of a virtual, distributed classes where the students are geographically scattered and communicate via the Internet.

3-Good to have:

- Experience in developing / coordinating development of Technology Enhanced Pedagogical Framework for HEIs
- Experience with a high-performance content distribution network to ship multimedia content across worldwide web.
- Extensive knowledge / experience in working with WWW server and client, delivery of hypermedia pages, e-books, glossary, dynamic shared calendars etc.
- Courseware authoring and international IPR
- GDPR compliance
- Experience with IT infrastructure and cloud development
- Engineering and software architecture design
- DevOps, project and product management

The candidate should be completely fluent in English.

Speaking one of the languages of the involved universities (French, Spanish, Italian, Portuguese, Romanian), **beside English** will be a plus.

Other competencies and type of experience:

- Competences and experience in conducting and implementing agile processes
- Competences and experience in group coordination
- Competences and experience in working with multicultural groups
- Sound knowledge of various operating systems and databases

In terms of personality profile:

- Proactive attitude & initiative
- Creativity
- Internal motivation for hard working
- Resilience
- Time management skills

References for further exploration:

https://www.researchgate.net/publication/220880633 Adapting LMS architecture to the SOA an Architectural Approach

https://www.academia.edu/1053549/An architecture for open learning management sy stems

Employment conditions:

Assignment: direction of digital technologies 3-year contract with 2 month trial period Monthly gross salary: 3500€ Starting February 2021.

Recruitment process:

Send a CV and an application letter to: Frédéric Cieutat (<u>frederic.cieutat@univ-pau.fr</u>) before February, 1st of 2021