

A large dark red 'D' shape on the left and two small decorative crosses (one blue, one brown) to the right of the word 'PFE'.

PFE BOOK

2026 : : : : : : : : : :

Internship opportunities for students
in IT and sciences

About Us

We Transform Medical Ideas into Smart Innovations

SmartLab is the innovation and research hub of the **Faculty of Medicine of Monastir**, dedicated to bridging the gap between medicine, engineering, and artificial intelligence.

Our team of **doctors, engineers, and students** designs intelligent solutions for real-time patient monitoring, medical data management, and healthcare training.

We combine **research, technology, and creativity** to shape the future of healthcare in Tunisia.

“Where medicine meets technology — and innovation becomes reality”



“Our Missions”

01 To design and develop innovative e-health platforms (telemedicine, e-learning, EMR).

02 To integrate artificial intelligence into medical and educational applications.

03 To promote collaboration between students, researchers, and healthcare professionals.



“Areas of expertise”



- 01** Web and mobile development (Odoo, Flutter, Laravel, React).
- 02** Artificial intelligence applied to healthcare.
- 03** Medical data management and visualization.
- 04** Cloud solutions and interoperability.

Internship Fields

Explore Opportunities in Digital Health

01 AI in Healthcare



02 Telemedicine Platforms



03 Medical Data Integration



Internship Fields

Explore Opportunities in Digital Health



IoT Monitoring

04



App Development

05



AI Integration

06

Why Join?

SmartLab



Dedicated Odoo Training

Receive hands-on **training** on Odoo development delivered by an experienced **Odoo expert**.

Access to Premium Tools

Gain insights from **experts in medicine and technology**.

Work with paid subscriptions we provide:

- Adobe Photoshop & Illustrator
- Gemini, Perplexity, Synthesia, VTS Editor, etc.

Real-World Problems

Tackle **real-life challenges** in digital health and AI.

Mentorship

Gain insights from **experts in medicine and technology.**

Collaboration

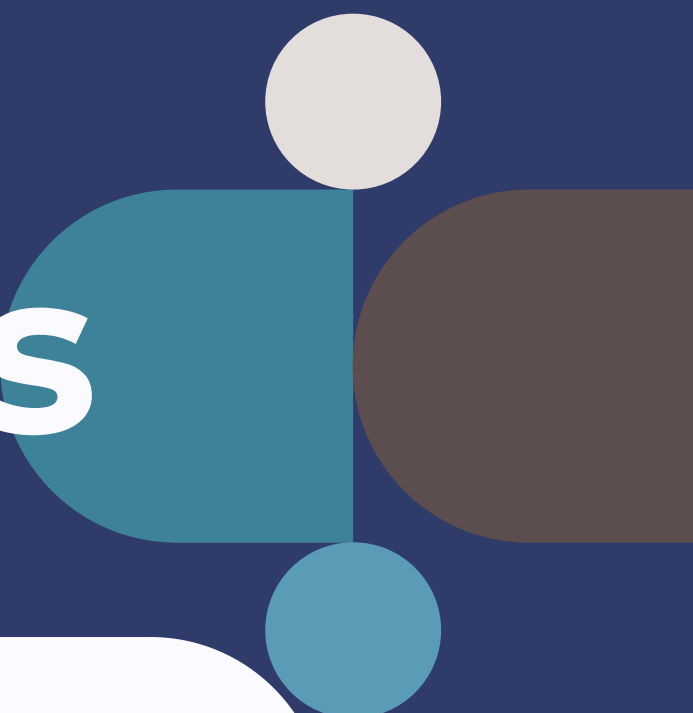
Work closely with **hospitals and innovative startups.**

Why Join? SmartLab





Internship Details



The internship lasts **3–12 months** at SmartLab, targeting students in **medicine, computer science, and biomedical engineering.**



Application Process

+ To apply, send your CV and a motivation letter to **smartlab.fmm@gmail.com**, mentioning your preferred project.

Applications are open until February 2026.

1. Submit your CV & motivation letter

2. Attend an interview

3. Receive a confirmation email



Projects



Domaine 1

Health & Telemedicine

Project 1

Odoo Module for Medical Management (Integrated EMR)

Objective: Develop a complete module to manage medical records in Odoo.

Features:

- Patient file (history, allergies, treatments)
- Integrated appointment calendar
- Consultation and prescription history
- Automatic generation of medical reports (PDF)

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Stack: Odoo (Python), PostgreSQL, XML, QWeb Reports

Project 2

Telemedicine Module in Odoo



Objective: Integrate video consultation and secure messaging.

Features:

- Patient/doctor scheduling
- Video call link (Zoom, Jitsi, WebRTC)
- Conversation history
- Automatic notifications (email/SMS)



Stack: Odoo + WebRTC API + Twilio/Zoom API



Advanced option: AI for consultation transcription or summarization

Project 3

Health Monitoring & AI Alerts Module

Objective: Connect patient data (e.g., blood pressure, glucose) and detect anomalies via an AI microservice

Features:

- Monitoring dashboard
- Automatic alerts for abnormal values
- AI integration via Flask API



Stack: Odoo + FastAPI (AI) + Pandas + Plotly

Domaine 2

Medical Management & ERP

Project 4

Odoo Module for Medical Center + Management

Objective: Combine medical and administrative management.

Features:

- Patients, doctors, rooms, scheduling
- Inventory (pharmacy, equipment)
- Billing and insurance
- Analytical dashboard (visits, revenue, specialties)



Stack: Odoo (Python backend + XML frontend)



Advanced option: Integration with Power BI for analytics

Project 5

Intelligent Appointment + Management System

Objective: Automatically schedule appointments based on specialty and availability.

Features:

- Dynamic resource-based scheduling (doctor/room)
- Filtering by specialty
- Automatic notifications



Stack: Odoo + scikit-learn (recommendation) + cron jobs



Integrated AI : Automatic recommendation of optimal time slots.

Project 6

Medical Tests & Laboratory + Management Module

Objective: Manage medical tests and reports.

Features:

- Recording of tests (biochemistry, hematology, etc.)
- Automatic generation of PDF reports
- Integration with Odoo patients



Stack: Odoo + QWeb Reports + Python

Domaine 3

AI and Data

Project 7



Odoo + AI for No-Show Appointment Prediction

Objective: Detect patients at risk of missing their appointments

Data used: History, weather, visit frequency, waiting time.

AI model : Classification (Random Forest / XGBoost).

Features:

- Probability score of no-show
- Automatic SMS reminder



Stack: Odoo + scikit-learn + Flask API + Twilio

Project 8



Medical Performance Dashboard

Objective: Help managers visualize performance metrics (consultation time, satisfaction, readmission rate).

Features:

- Custom dashboards
- Dynamic charts (Plotly / Chart.js)
- Automatic export to PDF/Excel



Stack: Odoo + PostgreSQL + Odoo BI + Chart.js

Project 9



AI Marketing Assistant (Email Automation)

Objective: Develop an AI agent that automatically analyzes and responds to incoming platform emails to assist users, improve engagement, and reduce response time.

Features:

- NLP-based understanding of email intent
- Automatic draft generation and smart replies
- Prioritization and classification of messages
- Integration with Gmail / Odoo CRM / platform inbox
- Dashboard for review and analytics



Stack: Python (FastAPI) + OpenAI API + Odoo CRM + PostgreSQL + LangChain

Domaine 4

System Integrations

Project 10



Odoo + IoT: Real-Time Medical Device Monitoring

Objective: Connect Odoo to medical IoT sensors.

Features:

- Data transfer (temperature, SpO2, etc.) to Odoo
- Real-time display and automatic alerts



Stack: Odoo + MQTT + Raspberry Pi + Python

Project 11



Medical CRM (Patient Relationship Management)

Objective: Adapt Odoo CRM for patient follow-up.

Features:

- Patient pipeline (prospect → follow-up → retention)
- Automatic email reminders
- Satisfaction analysis



Stack: Odoo CRM + Email Marketing + Automation



Thank You!

Together, we're shaping the future of **digital health**.
This is just the beginning — **SmartLab Health Platform** continues
to innovate at the crossroads of **AI, medicine, and technology**.

Let's build smarter healthcare together

