INTERNSHIPBOOK 2026

PROXYM®

START YOUR CAREER OFF RIGHT

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PROXYM

WHO ARE WE?

Proxym is a leading international Digital Services Group, founded in 2006, that supports organizations across the EMEA region in accelerating their digital and AI transformation. With 280 consultants worldwide, we deliver tailored digital services and innovative solutions, primarily for the financial and public sectors.

Our digital finance product suite - Bankerise for banking and Insurise for insurance - drives and modernizes the transformation of financial institutions across the globe, enabling smarter, faster, and more secure digital experiences.

At Proxym, we bring together technological expertise, industry knowledge, a strong commitment to our customers' success, and a culture of innovation. With a deep understanding of multicultural contexts, we help our clients thrive in an ever-evolving digital world. Our customers include banks, insurance companies, fintechs, and Gulf governmental entities.

Proxym | We Deliver Your Digital & AI Ambitions

Mission,Vision & Values

Our Mission is to support **financial institutions** (Bank, Insurance...) **as well as public and private institutions** to **transform their digital ambitions into reality** thanks to the agility and commitment of our human capital who designs, **in a multicultural environment, solutions with innovative technologies.**

We aspire to be as important to the success of our customers and our human capital as they are to our own success. We aim to excel and leverage our innovative spirit and great HR potential to become **the recognized leader in digital solutions in the EMEA region.**

CHALLENGE

ENGAGEMENT

TEAMWORK

RESPONSABILIZATION

ADAPTABILITY

GLOBAL-MINDED

Proxym in Numbers
Expertise, Skills & Know How

2006
Fondation

+280
Digital Consultant

3
Continents
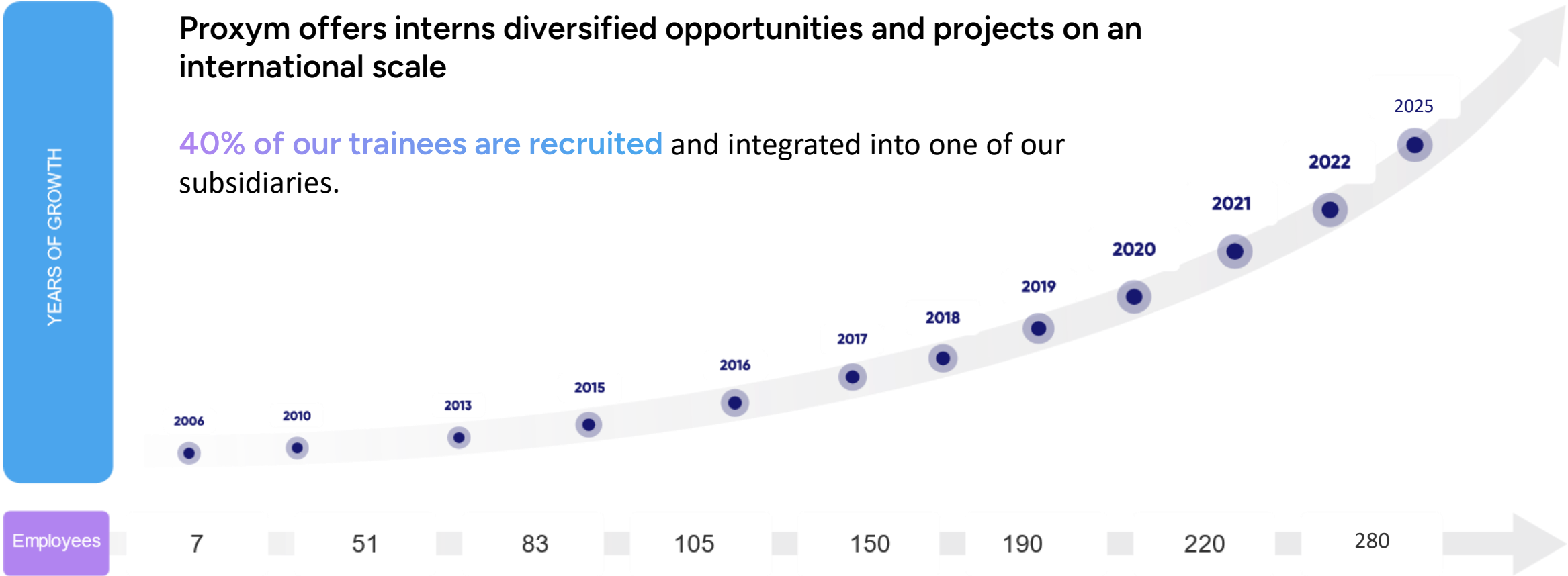
+600
IT & Digital Projects

05
Excellence centers :
Tunisia, France, UAE,
Egypt & Côte d'Ivoire

Industries
80% Financial Institutions
20% Start-ups & Innovation

Evolution of Proxym

Proxym offers interns diversified opportunities and projects on an international scale

40% of our trainees are recruited and integrated into one of our subsidiaries.

YEARS OF GROWTH

2025

2022

2021

2020

2019

2018

2017

2016

2015

2013

2010

2006

Employees

7   51   83   105   150   190   220   280

Global Offices

- 🟢 Proxym IT Tunisia
- 🔴 Proxym France
- 🟣 Proxym Middle East
- 🟡 Proxym Egypt
- 🔵 Proxym Africa

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TECHNOLOGIES

Front End
ReactJS, Angular, Flutter, React Native, Native Android, Native iOS, Kotlin

Back End
Java/JEE, Spring, Node JS, BPM, SQL/noSQL Databases

Cloud DevOps & Integrations
Microsoft Azur, Amazon AWS, Kubernetes, Kafka, API SOAP / REST, Docker, GIT, ArgoCD, KMS, KeyCloak, Jenkins

BENEFITS

PROXYM®

LEARNING AND SKILLS DEVELOPMENT

TECHNICAL TRAINING

COACHING

SUPERVISORY

HOW TO APPLY?

Steps to Follow

https://trainees-platform.proxym-group.net

| REGISTER ON THE PLATFORM | APPLY (3 SUBJECTS MAXIMUM) | INTERVIEWS | VALIDATION |

LIST OF PROJECTS

PROPOSED TOPICS

PROPOSED TOPICS

Smart Job Application Assistant

PROXYM

REF : PRX-2026-01

This project aims to simplify and automate the job application process.

- It helps users automatically search and collect job opportunities that match their profile and preferences.

- It generates personalized CVs and cover letters adapted to each application.

- Using Selenium, it can automatically fill in forms and submit applications on behalf of the user.

- Users can track the jobs they applied to and manage the documents sent through a clear and interactive dashboard.

1 Trainee

Technologies and Tools :

- Spring Boot
- Selenium
- React
- AI Tools
- PostgreSQL

Required profile

Engineer profile / Bachelor's degree

Intelligent and Automated Recruitment Platform

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REF : PRX-2026-02

Companies spend a significant amount of time and resources on the recruitment process — sorting CVs, evaluating candidates, scheduling interviews, and making final selections.

The project aims to optimize the recruitment process by automating candidate management and evaluation through AI.

It focuses on centralizing applications, enabling intelligent CV matching, reducing human bias, automating pre-screening interviews, and providing recruiters with a smart dashboard for better decision-making.

1 Trainee

Technologies and Tools :

- Spring Boot, Spring security, keycloak
- PostgreSQL/MongoDB
- React
- AI Tools

Required profile

Engineer profile

Banking Customer Support AGENT

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REF : PRX-2026-03

The project develops an AI-powered chatbot for a digital banking platform to provide automated, real-time customer support.

It understands natural language queries, accesses account data securely, and performs common banking operations like balance checks and fund transfers.

For complex issues, it creates support tickets managed through Flowable BPMN for efficient workflow handling.

The solution combines a Spring Boot backend, React.js interface, and AI module for intelligent conversation management.

1 Trainee

Technologies and Tools :

- Spring Boot
- PostgreSQL
- RESTful API
- Flowable BPMN
- React.js/TypeScript
- OpenAI API / Anthropic Claude API

Required profile

Engineer profile

AI Debugger

REF : PRX-2026-04

AI Assistant that automatically analyzes error logs, stack traces, and exceptions from Proxym applications.

It explains the probable cause of the bug in French, suggests concrete solutions with code examples, and detects recurring error patterns.

Includes IDE integration (IntelliJ plugin) and a web dashboard for historical analysis.

1 Trainee

Technologies and Tools :

- Spring Boot
- React Dashboard
- OpenAI API / Claude
- Elasticsearch (logs)
- Logstash
- Redis Cache
- IntelliJ Plugin SDK
- PostgreSQL

Required profile

Engineer profile / Bachelor's degree

Smart Mobile App for Vehicle Documents and Automated Accident Reporting

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REF : PRX-2026-05

This project develops an intelligent mobile app for managing vehicle documents and automating accident reporting. It allows users to scan and store key documents, automatically extract information via OCR, and receive reminders before expiration.

In case of an accident, the app uses stored documents and photos to generate a digital report, with computer vision identifying vehicles, impacts, and creating an automatic scene sketch. Users can complete additional details and share the report with insurance companies.

The solution combines AI, mobile technology, and automation to offer a practical, secure, and innovative tool for drivers.

2 Trainees

Technologies and Tools :

- React Native (TypeScript)
- Java / Python
- MongoDB
- IA / OCR : Google ML Kit, OpenAI Vision API

Required profile

Engineer profile / Bachelor's degree

Intelligent AI-Powered Medical Emergency Management Platform

REF : PRX-2026-06

The project consists of designing and developing an intelligent medical emergency management platform that connects citizens, dispatch operators, response teams, and hospitals in real time.
The objective is to improve the speed of alert processing, the accuracy of transmitted information, and the coordination among the different emergency actors.

The solution is based on a citizen mobile application for sending emergency alerts, an operator dashboard for managing and prioritizing incidents, and a hospital interface for early reception of patient information.

A secure backend ensures data centralization and the integration of artificial intelligence modules (voice transcription, severity classification, automatic summarization).

2 Trainees

Technologies and Tools :

- React.js, TypeScript, TailwindCSS, ...
- React Native
- Java / Spring Boot
- PostgreSQL

Required profile
Engineer profile

Intelligent AI-Powered Reservation and Scheduling System

REF : PRX-2026-07

The project involves designing and developing an intelligent booking and scheduling system that allows users to easily organize meetings or events.
By integrating natural language processing and smart scheduling algorithms, users can make requests such as:

"Schedule a meeting with X and Y tomorrow after 3 PM."

The system will automatically identify the best available time slot among participants, create the event, and generate a video conference link.

This system is designed to be intuitive, intelligent, and interoperable with external services such as Google Calendar, Outlook, and Zoom/Teams.

1 Trainee

Technologies and Tools :

- React.js
- NestJS (Node.js)
- PostgreSQL

Required profile
Engineer profile / Bachelor's degree

AI Mentor for Junior Developers

REF : PRX-2026-08

The Intelligent Learning Assistant for Junior Developers is a mobile application that supports beginners in their development journey.

It offers a personalized learning plan, AI-generated lessons and code examples, automatically graded exercises and quizzes, and progress tracking through a dashboard. Motivation is enhanced with gamification elements (XP, levels, badges) and an interactive AI assistant capable of answering questions and guiding the user.

The goal is to make learning structured, effective, and engaging while preparing users with practical skills.

1 Trainee

Technologies and Tools :

- React Native (TypeScript).
- NestJS (Node.js) /REST or GraphQL.
- PostgreSQL, MinIO

Required profile

Engineer profile / Bachelor's degree

Secure Document Generation & Summarization for Banking (RAG + LLM)

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REF : PRX-2026-09

The project develops an intelligent RAG-based module for a banking platform that automatically generates official documents and client summaries.

It ensures accuracy, traceability, and compliance with human validation, reduces processing time, enhances productivity, and integrates seamlessly with existing systems.

1 Trainee

Technologies and Tools :

- React JS
- NestJS (APIs) + microservice Python for ML
- PostgreSQL, MinIO

Required profile

Engineer profile / Bachelor's degree

AI-Powered Online Assessment and Candidate Evaluation Platform

REF : PRX-2026-10

The project aims to develop a platform for conducting online multiple-choice tests. It involves :

- Dynamic generation of a question bank using a Large Language Model (LLM) combined with web search, followed by validation by an engineer before deployment.

- Smart question selection based on the candidate's CV and professional background. Sending candidates a secure, single-use test link.

- Online testing with integrated timers.

- Automatic result calculation.

- Result transmission to the manager and HR team.

- Generation of an AI-powered candidate assessment report.

2 Trainees

Technologies and Tools :
- Sprint-boot
- React JS

Required profile
Engineer profile / Bachelor's degree

Intelligent Health Assistant for Diabetic Patients

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REF : PRX-2026-11

Managing diabetes and cholesterol requires regular monitoring of meals, physical activity, treatments, and biological parameters. Patients need personalized recommendations and clear explanations of their health data.

The goal is to design a mobile application integrating a large language model (LLM) to support patients, analyze their data, and provide personalized advice conversationally.

Objectives:

- Centralize health data (blood glucose, cholesterol, meals, activity).

- Provide an intelligent conversational assistant.

- Generate alerts for critical values (blood glucose, triglycerides).

1 Trainee

Technologies and Tools :

- React Native
- Node JS
- PostgreSQL

Required profile

Engineer profile / Bachelor's degree

Intelligent Project Task Estimation Application

REF : PRX-2026-12

In project management, one major challenge is realistically estimating the time, cost, and resources required for each task. Traditional methods (PERT, Gantt, manual planning) often rely on the project manager's experience and can be biased or inaccurate.

The project aims to develop a web application that automatically estimates project tasks based on historical project data and AI predictions.

Objectives:

- Develop an intelligent web application for task estimation.

- Use AI/ML to predict the duration, cost, and workload for each task.

1 Trainee

Technologies and Tools :

- React JS
- Node JS
- PostgreSQL

Required profile

Engineer profile / Bachelor's degree

AI-Based Knowledge Capitalization System

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REF : PRX-2026-13

Implement an AI platform that centralizes and organizes the project team's expertise.

The system would allow searching, summarizing, and extracting relevant information from technical documentation and meeting reports.

2 Trainees

Technologies and Tools :

- Node JS (Express)
- IA / NLP: Python (LangChain JS)
- Elasticsearch or PostgreSQL + pgvector
- React
- MinIO or AWS S3

Required profile

Engineer profile

AI-Powered Customer Journey Automation with Spring AI

PROXYM

REF : PRX-2026-14

Smart Prioritization and Classification: Uses LLM to automatically classify incoming tasks by priority and complexity, ensuring agents focus on the most critical cases.

Summary and Action Recommendations: For ongoing tasks, the AI agent generates concise customer context summaries and suggests actions based on history and journey steps.

Proactive Detection and Alerts (Actionable AI): Monitors customer journeys, detects anomalies (e.g., client stuck at a stage), and triggers system functions (e.g., sendReminderEmail(clientId)) or alerts the user with justification.

1 Trainee

Technologies and Tools :

- Spring Boot
- Spring AI
- Langchain4J

Required profile

Engineer profile

Intelligent Financial Product Recommendation Engine

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REF : PRX-2026-15

The project aims to develop an AI module integrated into an existing banking solution, capable of offering clients financial products tailored to their profile and behavior (savings, investments, loans, insurance).

The system analyzes transactions, spending habits, financial history, and demographic data to generate proactive, relevant, and personalized recommendations.
Recommendations are delivered through the client interface (web/mobile) and may include intelligent notifications, while ensuring privacy and compliance standards are maintained.

1 Trainee

Technologies and Tools :

- React JS / React Native
- Java / Spring Boot
- PostgreSQL

Required profile
Engineer profile

Internal RBAC Manager Platform for Kubernetes with GitOps Integration

REF : PRX-2026-16

Designed and developed a lightweight, modular internal RBAC manager platform for Kubernetes, providing UI-based RBAC management and automated GitOps workflows.

Supports OIDC-based external access and is designed for extensibility, including multi-tenant cluster support and future enhancements.

1 Trainee

Technologies and Tools :

- Kubernetes
- ArgoCD / FluxCD
- OIDC / Dex / Keycloak
- Node JS + React JS
- Helm / Kustomize

Required profile

Engineer profile

Automated System for Kubernetes Disaster Recovery

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REF : PRX-2026-17

This project consists of building an automated system that can back up a running Kubernetes application, delete the existing cluster, recreate identical infrastructure, and fully restore the application — all with a single click.

The system performs automatic backups of Kubernetes resources and persistent data, stores them safely, and verifies their integrity. It then destroys the original cluster in a controlled way and provisions a new one using Infrastructure-as-Code tools to ensure an identical setup.

This project showcases skills in DevOps automation, Kubernetes management, cloud infrastructure, and disaster recovery.

1 Trainee

Technologies and Tools :

- Velero
- Ansible
- Kubespray
- Python
- React JS

Required profile

Engineer profile

Implementation of an Intelligent and Autonomous SOC for IT Infrastructure Security

REF : PRX-2026-18

The project involves designing and deploying an intelligent, autonomous Security Operations Center (SOC) capable of collecting, centralizing, and analyzing logs from various sources (servers, firewalls, endpoints, cloud applications).

Its goal is to proactively detect security incidents, reduce alert noise, and automate simple responses to effectively secure IT infrastructure.

The intern will integrate open-source tools for SIEM, incident analysis, visualization, and automation to deliver an operational and documented SOC.

1 Trainee

Technologies and Tools :

- Operating system
- Firewall
- Network monitoring
- SIEM
- Orchestration / Automation

Required profile

Engineer profile / Bachelor's degree