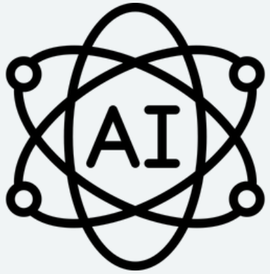
PFE BOOK 2026

By NovaHann

WHAT WE DO!

At NovaHann, we transform ideas into intelligent, high-impact digital solutions.
Our work spans across engineering, design, and innovation, with a strong focus on solving real-world challenges through technology.

Software & FullStack Applications



Artificial Intelligence

Digital Transformation & IoT

WHAT WE EXPECT

At NovaHann, we seek individuals who are curious, proactive, and passionate about technology, we expect:

- A mindset of continuous learning — Technology evolves fast; we value people who grow with it.
- Creativity and problem-solving spirit — We love ideas, experimentation, and smart solutions.
- Responsibility and ownership — We trust people who take initiatives and stand behind their work.
- Team collaboration — We build together, communicate openly, and support each other.
- Commitment to quality — From code to design to strategy, we expect thoughtful, clean, and impactful work.

WHAT WE OFFER

WHY JOIN US?

1. Grow fast by working on real, modern technologies.

2. Contribute to meaningful projects that create real-world impact.

3. Innovate freely in a supportive environment where your ideas matter.

4. Be part of a vision where your ideas truly matter.

PFE PROJECTS

SUBJECT #01

AutoVision Arm

Description

Robotic arm that detects and classifies objects automatically using an AI camera.

Tasks

- Build the AI detection system (YOLOv5 + OpenCV).
- Integrate camera and robotic arm using ROS2.
- Develop automatic pick-and-place control.
- Test and optimize system performance.

Required

Raspberry Pi

YOLOv5

OpenCV

ROS2

Python

SUBJECT #02

Smart Consumption Monitor

Description

Prototype that measures daily consumption, uploads the data online, and predicts future usage with AI regression.

Tasks

- Develop the IoT system to measure and upload consumption data (ESP32 + MQTT).
- Build the backend & AI model to predict future usage (FastAPI + Scikit-Learn).
- Create the web dashboard to visualize real-time and predicted data.

Required

React

Firebase

ESP32

Scikit-Learn

MQTT

Python (FastAPI)

SUBJECT #03

VitalSense Bracelet

Description

Small wearable bracelet that reads vital signs and uses AI to predict possible heart-attack risks, connected to a mobile app.

Tasks

- Develop the wearable device to collect vital signs (ESP32 + MAX30102 + BLE).
- Build the AI model to predict heart-attack risk (TensorFlow Lite).
- Create the Android app for real-time monitoring and alerts (Flutter + Firebase).

Required

- Flutter
- Firebase
- ESP32
- BLE
- MAX30102 sensor
- TensorFlow Lite

SUBJECT #04

Internal School Database & Sales Assignment Platform

Description

Build a private internal system that scrapes publicly available school/kindergarten data, classifies it by region, stores it in a database, and provides a web dashboard to visualize and assign schools to sales representatives.

Tasks

- Scrape & clean public institutional data
- Build private database + backend API
- Develop internal dashboard
- Implement sales assignment features

Required

Python

Node.js

React.js

PostgreSQL

Supabase Auth

PowerBI

SUBJECT #05

CV Builder Platform

Description

Generate polished CVs from user inputs with template preview, PDF export, and optional AI text suggestions.

Tasks

- Design templates & data model
- Build form & preview engine
- Implement PDF export & backend
- Add import, AI assist, deploy

Required

- React.js
- Node.js
- PostgreSQL
- Supabase
- Puppeteer (or any other pdf generator

HOW TO APPLY?

Apply using the online form

Scan or click the QR code or use the link below

- **Select the topic(s) that interest you.**
- **Upload your CV in PDF format using the form.**

Application Link: **https://forms.gle/41pgQuMa57eqWt7E6**

CONTACT US

FOR MORE DETAILS

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