

# WICMIC PFE BOOK OVERVIEW (IT)

Higg  
Index



EARTH



ECO F



Laser



Ozone



Bubbles



Recycling



MASTERING  
SUSTAINABILITY:  
WHERE PERFECTION ALIGNS  
WITH OUR PHILOSOPHY

RE

DUCE.  
USE.  
RECYCLE.

# ABOUT WICMIC GROUP

The **WICMIC Group**, founded in 1991, is a Tunisian-based international textile manufacturer that primarily focuses on producing jeans. Known for its strong commitment to sustainability and innovation, WICMIC has implemented innovative practices.

We collaborate with various partners and we utilize advanced technologies.

WICMIC's efforts contribute to a broader goal of aligning with international standards in sustainable and circular textile manufacturing.



## Laser Edge: Bold Jackets & Straight Pants

Distinctive washes, creative laser patterns and edgy destroyed finishes, designed to bring a bold, modern touch.







EVERY CLEAN  
FITS PERFECTLY



### Laser Edge: Bold Jackets & Straight Pants

Distinctive washes, creative laser patterns  
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**RE** DUCE. USE. RECYCLE.

#World Recycling Day

# TOPICS



#01



4-6 MONTHS

# AI-Driven Wash Recipe Generation and Optimization for Denim

This project aims to use historical wash data to create a generative model that can both simulate and optimize denim washing processes. By analyzing patterns in wash recipes and their effects, this system would provide textile companies with AI-driven recommendations to improve consistency, quality, and sustainability.

REQUIRED  
PRACTICAL SKILLS:

**Python (Pandas, NumPy, Scikit-Learn), TensorFlow, PyTorch, Stable-Baselines3**



# AI-Powered Trend Analysis and Forecasting for Denim Fashion

By leveraging natural language processing (NLP) and time-series forecasting, this system would scan online sources and analyze historical sales data to predict denim fashion trends. The resulting insights will allow fashion brands to anticipate shifts in consumer preferences and make data-driven design decisions.

Use historical sales data to understand demand patterns for various denim styles over time.

Apply time-series models, such as ARIMA, Prophet, or LSTM, to forecast demand for specific styles, colors, or washes.

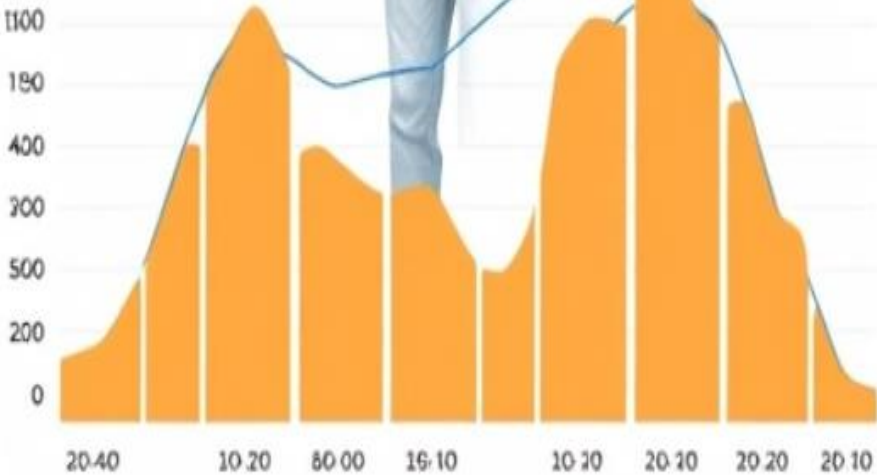
REQUIRED  
PRACTICAL SKILLS:

Scrapy or BeautifulSoup for web scraping, NLTK, SpaCy LSTM

## DENIM FASHION



### TREND ANALYSTICS







4-6 MONTHS

# Automated Fabric and Garment Tagging with NLP

This project will leverage natural language processing (NLP) to analyze product descriptions and assign standardized tags based on fabric types, garment categories, colors, patterns, and additional attributes (e.g., eco-friendly, waterproof). By automating tagging, the system will enhance catalog accuracy, improve search functionality, and enable more targeted recommendations.

## REQUIRED PRACTICAL SKILLS:

**Python (Pandas, NLTK, and Scikit-learn for text processing and classification), Pattern Matching: Regular expressions or rule-based tagging**



4-6 MONTHS

# AI-Driven Production Lead Time Optimization for Textile Manufacturing

Production planning in textile manufacturing can be complex due to the variety of processes involved (e.g., cutting, dyeing, stitching, quality control), fluctuations in demand, and constraints like machine availability and worker shifts. This AI-based system will utilize historical production data, machine utilization rates, and resource availability to make intelligent predictions and decisions about production scheduling and lead times..

REQUIRED  
PRACTICAL SKILLS:

**Python, Scikit-Learn, TensorFlow, or PyTorch, LSTM, DEAP, PuLP or SciPy**





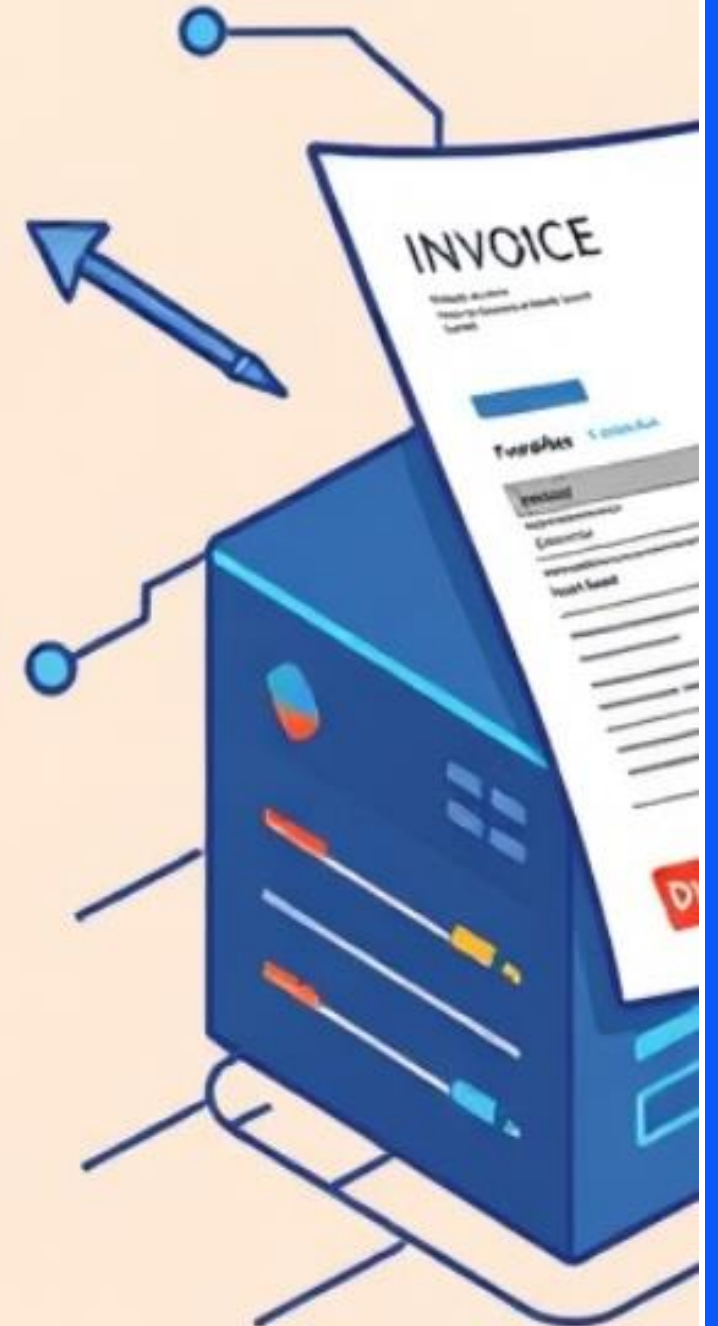
4-6 MONTHS

# AI-Driven PDF Invoice Data Extraction and Database Storage

Manually extracting data from invoices is time-consuming and prone to errors. This project will use natural language processing (NLP) and optical character recognition (OCR) to identify and extract essential fields (e.g., invoice number, vendor name, date, total amount) from PDF invoices. The system will then clean and validate the data before storing it in a SQL Server database. This solution can be highly valuable for companies managing large volumes of invoices, as it reduces human labor and enhances data accuracy.

REQUIRED  
PRACTICAL SKILLS:

**.NET Core, Python (Pandas, Regex, NLTK), Tesseract OCR**



#06



1 or 2 Interns

4-6 MONTHS

## AI-Driven Supplier Performance Rating and Invoice Management System

In supply chain management, consistently evaluating supplier performance is essential for optimizing costs, maintaining quality, and reducing supply chain risks. This project uses AI to automate the analysis of supplier performance by processing invoices, delivery records, and quality data to create dynamic performance scores. This system enables continuous monitoring and rating of suppliers, providing key insights into vendor reliability and efficiency.

REQUIRED  
PRACTICAL SKILLS:

**.NET Core, Tesseract OCR, SQL Server**





# STATISTICAL INSIGHTS



## SUCCESSFUL PROJECTS

This percentage represents the proportion of projects completed successfully within the stipulated time.



## PROJECTS WITH DELAYS

This reflects projects that experienced delays due to various challenges.

# NEXT STEPS



## FUTURE CONSIDERATIONS

WICMIC Group aims to innovate continuously, focusing on enhancing learning and adapting to new market demands.

**SEND  
YOUR CV  
HOW TO APPLY**

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