Queries used for testing:

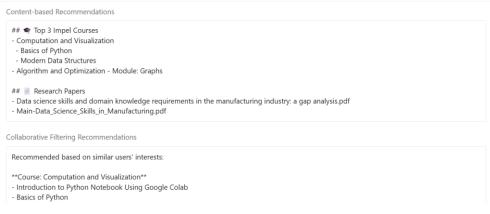
- 1. Irrelevant queries: works single sorry message
- 2. Python for industrial engineers works
- 3. What are the best courses to transition into Data Science from a mechanical engineering background? works
- 4. I am a final-year mechanical engineering student. What courses can help me get into data science? works
- 5. I want to become a machine learning engineer in the automotive sector. What should I study? works
- 6. How do I switch from a production engineer to a data analyst role in manufacturing? works
- 7. What courses can help me apply AI to optimize manufacturing operations? works
- 8. As a machine operator, what courses can help me upskill into a data-driven role? works
- 9. Are there any courses that teach Data Visualization for mechanical engineers? works
- 10. What courses can help me use sensor data and perform analytics? works
- 11. What courses cover Data Science and AI in Industry 4.0? works
- 12. What are the modules included in Data Analytics course? works
- 13. What are the modules under Sensor Analytics course? works
- 14. List all the IMPEL courses works
- 15. What are the courses and modules that teach Machine Learning? works
- 16. What are the courses for optimization? works
- 17. Which IMPEL courses should I take to deepen my knowledge of natural language processing? works
- 18. What does a machine learning engineer do, and what is their average salary? works
- 19. What are the latest trending skills for data engineers in 2025? works
- 20. What courses should I take to become a data scientist, and what are the top trending skills for that role? works
- 21. Tell me about product manager careers: responsibilities, salary ranges, and indemand skills. works
- 22. Based on my resume, recommend courses that will help me transition into a cloud engineering role works
- 23. Given my background, which courses should I take to move into a AI research role, and what skills should I develop for that career? works
- 24. What is the learning path to become a Data Scientist? works
- 25. What can we do for analytics in the manufacturing industry? works
- 26. What are the skill requirements for data science jobs in the manufacturing industry? works

Query: Python courses for industrial engineers:

Personalized Course Recommendation System

User ID	Education	Age Group	Professional Status	Enter Your Query
P101	○ High School	Under 18	Student	Python courses for industrial engineers
	Undergraduate	18-25	Professional	industrial engineers
	Graduate	26-40 40	+	
				
		Drop File Here - or -		
		Click to Upload		

Recommendation Agent activated: Personalized Recommendations Ready!



- IIIITOUUCIIOII IO Dala VISUAIIZALIOII
- Visualizing Amounts
- Visualizing Distributions and Relationships
- Visualizing Time Series
- **Course: Data Management for Analytics**
- Structured Query Language, Part 1
- Structured Query Language, Part 2
- Structured Query Language, Part 3

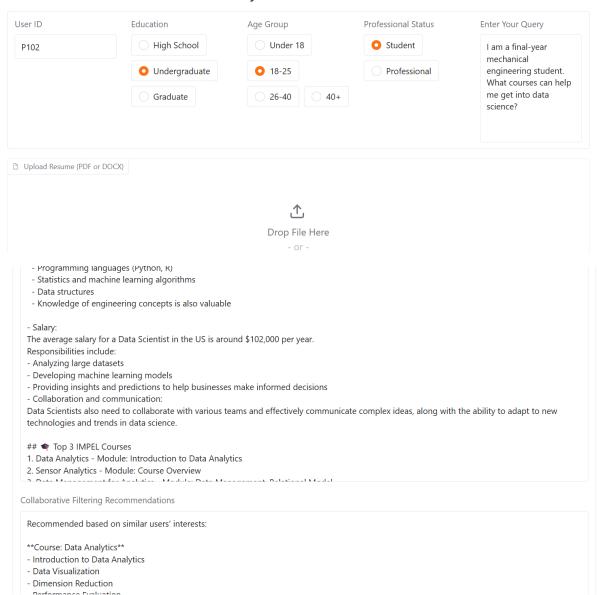
The courses and modules recommended above are specifically tailored to the user's interest in Python for industrial engineers. The "Computation and Visualization" course offers a comprehensive introduction to Python programming, data structures, and visualization techniques, providing a solid foundation for industrial engineering tasks. The "Data Management for Analytics" course delves into SQL (Structured Query Language), which is an invaluable skill for managing and manipulating data in databases, a common requirement for industrial engineers.

These courses will equip the user with practical Python skills and enhance their data handling expertise, ensuring they are well-prepared for various industrial engineering projects and challenges.

Similar Users Enrolled In

- Computation and Visualization
- Cyber-Manufacturing Systems
- Data Analytics
- Data Management for Analytics
- Robotics & Automation
- Sensor Analytics

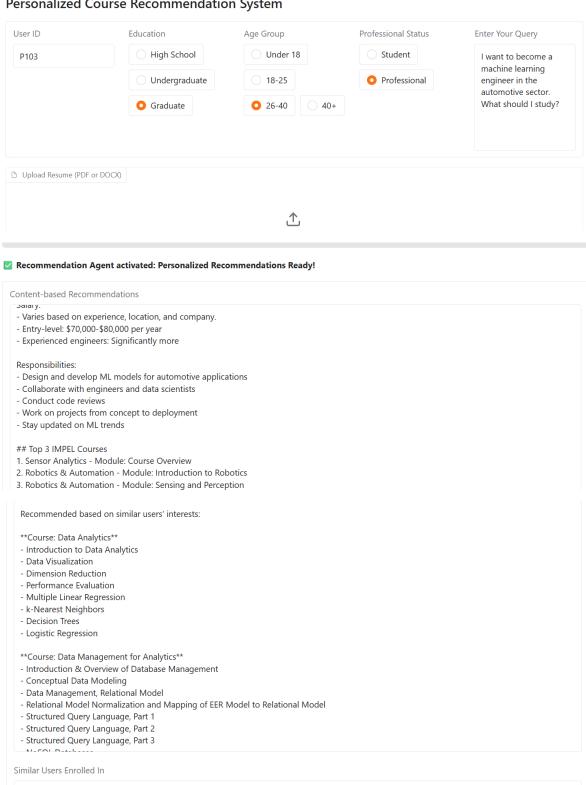
Query: I am a final-year mechanical engineering student. What courses can help me get into data science?



Query: I want to become a machine learning engineer in the automotive sector. What should I study?

Personalized Course Recommendation System

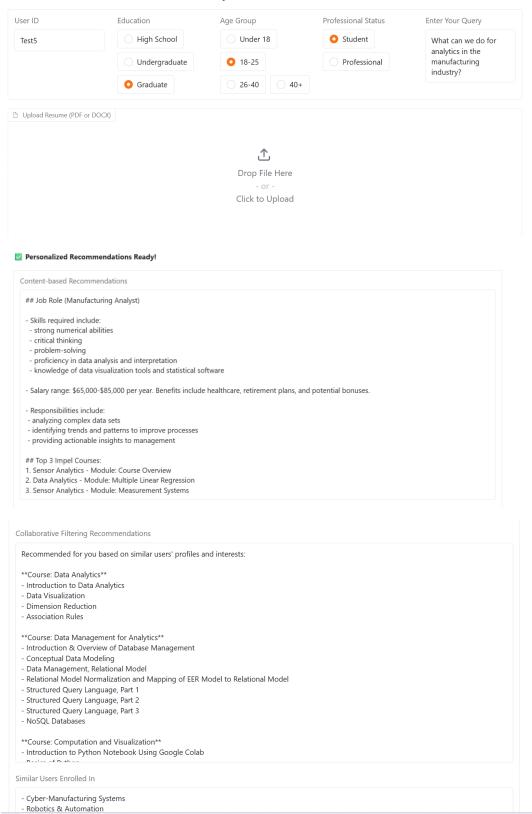
- Robotics & Automation - Sensor Analytics



Query: Are there any courses that teach Data Visualization for mechanical engineers?

Jser ID	Education	Age Group	Professional Status	Enter Your Query
P106	High School	Under 18	Student	Are there any court
	UndergraduateGraduate	18-25	Professional	that teach Data Visualization for mechanical engine
		26-40	40+	
Upload Resume (PDF	or DOCX)			
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## • Top 3 Impel				
- Module: Introdu	uction to Data Visualization			
	zing Distributions and Relationships			
- Data Analytics - Module: Data Vi	isualization			
## December De				
## Research Pa	apers •_Data_Science_Skill_Gap_An_Empirical_Ana	alvsis.pdf		
	s and domain knowledge requirements in		gap analysis.pdf	
	ce_Skills_in_Manufacturing.pdf nced Manufacturing Talent Gap.pdf			
closing the riava	need Manaractaring raient Sup.par			
Collaborative Filterin	ng Recommendations			
Visualizing Amou				
 Visualizing Amou Visualizing Distrib 	ints butions and Relationships			
- Visualizing Time				
This course "Comr	outation and Visualization," is specifically o	designed to provide an unders	standing of data visualization techniques	s which are
	ying information and insights effectively.			
teaches practical sl	kills for creating compelling and information	ve visualizations.		
Recommended base	ed on similar users' interests:			
	ion and Visualization**			
 Introduction to Date Visualizing Amount 				
- Visualizing Distribu	utions and Relationships			
- Visualizing Time Se	eries			
	utation and Visualization," is specifically de			
	ing information and insights effectively. Th lls for creating compelling and informative		concepts, explores various visualization	types, and
			m hadronan date d t-f d	
importance of visual	rroduction to Data Visualization," lays the I representation. The subsequent modules omprehensive coverage of different visual	, "Visualizing Amounts," "Visu		
"Visualizing Amount	ss" focuses on bar charts, pie charts, and h	eatmaps, teaching participant	s how to represent and analyze amount	s and
distributions effective plots, enabling learn	vely. "Visualizing Distributions and Relation lers to interpret data distributions and rela and trends, utilizing line plots, area plots, ar	nships" builds on this by explo ationships. "Visualizing Time S	oring histograms, density plots, scatter p eries" equips participants with techniqu	lots, and pair
imilar Users Enrolled		,		
Computation and \Data Analytics	visualization			
- Data Management	for Analytics			

Query: What can we do for analytics in the manufacturing industry?



Query: What are the skill requirements for data science jobs in manufacturing industries?

D112	Education	Age Group	Professional Status	Enter Your Query
P112	O High School	Under 18	Student	What are the skill
	Undergraduate Graduate	18-25	Professional	requirements for data science jobs in manufacturing industries
		26-40 40+		
Upload Resume (PDF or DOCX	0			
				
		Drop File Here		
		- or -		
		Click to Upload		
Recommendation Agent	activated: Personalized Reco	ommendations Ready!		
Content-based Recommend	ations			
## 💧 Trending Skills				
Hard Skills:				
		l SQL is essential for data manipula rithms, and database management.		
		ation, clustering, and neural netwo		
	: Proficiency in statistical analy ing effective visual representat	rsis and inference, and understandi	ing of advanced mathematica	I concepts.
	ng enective visual represental	ions of complex data.		
Soft Skills:				
		and developing innovative solution		
	standing business objectives a ing complex ideas to stakehol	and aligning data insights with com ders, verbally and in writing.	npany goals.	
- Collaboration: Working c	ross-functionally with various	teams.		
- Problem Solving: Solving	complex problems independe	ently.		
## 📋 Job Role: Skills, Res	ponsibilities, and Salary Expec	tations		
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Query: What is the learning path to become a Data Scientist?

Jser ID	Education	Age Group	Professional Status	Enter Your Query
P113	O High School	O Under 18	Student	What is the learning
	Undergraduate	18-25	Professional	path to become a I Scientist?
		25.40		
	Graduate	26-40 40+		
Upload Resume (PDF	or DOCX)			
		<u>,</u>		
		_		
		Drop File Here - or -		
		Click to Upload		
ecommendation A	gent activated: Personalized Recom	mendations Ready!		
ntent-based Recomr	mendations			
iviculari salary range				
Responsibilities:				
Mining large datase Developing machine				
Applying advanced	analytical techniques to real-world pr	oblems		
Collaborating with v Designing and cond	various organizational teams			
Interpreting results	acting experiments			
Presenting findings	to stakeholders			
# 🗬 Top 3 IMPEL C	ourses			
	odule: Introduction to Data Analytics Cybersecurity - Module: Al and Data I			
	odule: Logistic Regression	culics		
# 📄 Research Pape	rs			
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	Skills_in_Manufacturing.pdf		-p analysisipan	
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llaborative Filtering F	Recommendations			
laborative Filtering Re				
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k-Nearest Neighbors				
Naïve Bayes Decision Trees				
Logistic Regression				
Association Rules				
*Course: Data Manage	ment for Analytics** iew of Database Management			
Conceptual Data Mod	leling			
Data Management, Re Relational Model Nor	elational Model malization and Mapping of EER Model to	Relational Model		
Structured Query Lang	guage, Part 1	Relational Wodel		
Structured Query Lang Structured Query Lang				
NoSQL Databases	,g-, , u. e. s			
*Course: Computation	and Visualization**			
Introduction to Pytho	n Notebook Using Google Colab			
Basics of Python				
nilar Users Enrolled In				
Computation and Visu	ıalization			