

Learner's Compass Dashboard

1. My Idea for the Learner's Compass Dashboard


The current dashboards used in most LMS and EdTech platforms are not designed with the learner's career growth in mind. They mostly track course completion or offer limited insights into how the learning connects with career outcomes. The **Learner's Compass** aims to solve this by offering a career-focused, skill-oriented dashboard that helps learners like Ananya Sharma see where they stand in their career preparation journey.

Main Concept

The Learner's Compass is a personalized dashboard that tracks a learner's skills, projects, certifications, and career goals in one place. It provides real-time skill analysis, highlights the gaps between current knowledge and target job requirements, and offers actionable suggestions like courses.

It is designed to be interactive and dynamic. In the settings, Ananya can connect her GitHub, Coursera, LinkedIn, and Udemy accounts. Based on the data fetched from these sources, the dashboard will automatically update her skills, certifications, and projects. This digital footprint will help her visualize her current progress and align it with the roadmap of a Machine Learning Engineer or any other related career path.

Page 1



Saved Courses

Quiz

Notes

Explore Courses

Settings

Goal

Logout

Enrolled Courses

Python Libraries

View

Machine Learning

View

July 25, 2025

RoadMap Design for you

Welcome Back, ML Engineer!

Always stay updated in your Learner's Compass

Main Dashboard

Skills Deep Dive

Learning Timeline

75% Career Ready

45 Day Streak

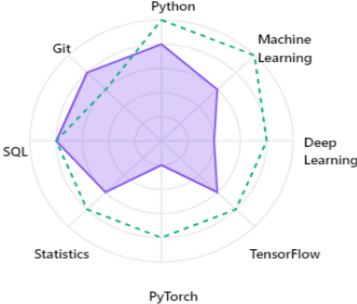
5 Courses Done

3 Certificates

Skills Analysis

Current Level Required Level

View Details



Python Machine Learning Deep Learning TensorFlow PyTorch Statistics SQL Git

Badges

5

- Python Master Completed Python fundamentals
- ML Practitioner Built first ML model
- Data Wizard Data analysis expert

Most Recent Badge: Keep Going

Connect with Mentor

- Sarah Johnson ML Engineer
- Raj Patel Data Scientist
- Lisa Chen AI Researcher

View All Mentors

Priority Skill Gaps

PyTorch Critical Gap 1/4

Progress 25%

Recommended Actions:

- PyTorch for Deep Learning Udacity • 3 months Start
- Build a Neural Network from Scratch Personal Project • 2 weeks Start

Deep Learning Moderate Gap 2/4

Progress 50%

Recommended Actions:

- Deep Learning Specialization Coursera • 4 months Start

Recent Projects

Movie Recommendation... completed

A collaborative filtering system that recommends movies based on user...

Completed: 28/2/2024

Technologies: Python Pandas Scikit-learn Flask +1 more

Skills demonstrated: Machine Learning Data Analysis Web Development

☆ 23 🗣 7

Stock Price Predictor completed

LSTM neural network to predict stock prices using historical data and technica...

Completed: 15/1/2024

Technologies: Python TensorFlow LSTM Yahoo Finance API

Skills demonstrated: Deep Learning Time Series Analysis Financial Modeling

☆ 45 🗣 12

Sentiment Analysis... completed

Real-time sentiment analysis of social media posts with interactive...

Completed: 20/3/2024

Technologies: Python Streamlit NLTK Twitter API +1 more

Skills demonstrated: NLP Data Visualization API Integration

☆ 31 🗣 9


Free Space to add something Important (Disclaimer, About, Quote, Funny Stuff)

Ananya, you're on track for ML Engineer!

Focus on AWS SageMaker, TensorFlow Serving, and deployment pipelines.

Try the 'ML Deployment on AWS' course.

Hiiiiii, I am Compass



Career Path Explorer

ML Engineer

High

Design and implement machine learning systems at scale

Match75%

Salary: ₹15-25 LPA

Data Scientist

High

Extract insights from data to drive business decisions

Match85%

Salary: ₹12-20 LPA

Research Scientist

Medium

Advance the field of AI through cutting-edge research

Match65%

Salary: ₹18-30 LPA

Required Skills

Python4/5

Machine Learning3/5

Deep Learning2/4

PyTorch1/4

MLOps0/3

Cloud Platforms0/3

Top Companies

Google>

Microsoft>

Amazon>

Flipkart>

Swiggy>

Zomato>

\$Average Salary: ₹15-25 LPA

👥Job Demand: High

🎯Your Match: 75%

Learning Timeline

- Completed Machine Learning Course
March 2024
- Built Movie Recommendation System
April 2024
- Started Deep Learning Specialization
May 2024

Page 1 :  Page 1.pdf

Page 2:  Page 2.pdf

Page 3:  Page 3.pdf

Key Features

- Skills Map**
A visual representation that shows Ananya’s current technical skills (like Python, SQL, TensorFlow) and compares them to the requirements for a Machine Learning Engineer role. This gives her clarity on where she stands.
- Skill Gap Finder**
This section shows the difference between her existing skills and the skills required for her dream job. It highlights high-priority gaps and recommends courses, articles, or project ideas to close them.
- Career Path Explorer**
An interactive feature that allows Ananya to explore other related roles like Data Scientist or MLOps Engineer. It shows how small changes in skills or certifications can open up new opportunities.
- Learning Progress Feed**
A timeline that doesn’t just track completed courses but also logs skills gained from projects. For example, if she used Pandas and Matplotlib in a Sentiment Analysis

project, it will be recorded here.

5. **Project Showcase**

Projects from GitHub will be automatically fetched and displayed along with the relevant skills and tools used. This helps recruiters and mentors see practical applications of her knowledge.

6. **Learning Quiz**

Based on her recent learning and skill level, a basic quiz can be generated using ChatGPT's API. This keeps her active and helps with knowledge retention.

7. **Notes Section**

A space where Ananya can write and save important notes she wants to remember from any course or project.

8. **Calendar Integration**

Integration with Google Calendar to track upcoming deadlines, events, interviews, and keep reminders. It will also show her scheduled learning sessions or quizzes.

9. **Mentorship and Feedback**

A section where Product Owners, mentors, or career coaches can leave comments or suggest actions. Ananya can also request a session if she needs support.

10. **Badges and Motivation**

Inspired by platforms like LeetCode, badges will be awarded for achieving skill milestones. This keeps learners motivated by gamifying progress.

11. **AI-Powered Insights**

The dashboard includes an AI assistant trained to guide Ananya. It will help her understand her strengths, give customized advice, and explain what's needed to reach her goals.

12. **Skill Analysis Tool**

This feature will analyze how far Ananya is from her target job in terms of skills, projects, and certifications. It gives a clear percentage or visual indicator to track her journey.

Tech & Data Plan

For the frontend, I will use **React.js** because it allows for a responsive and modular dashboard. With React, it's easier to build interactive components like the Skills Map, Career Path Explorer, and real-time Skill Gap charts with this, we can also use bootstrap or tailwindcss for prebuilt component

For backend, I will use **Node.js with Express.js** to build REST APIs and manage user data, career roadmaps, and course connections. Node.js is lightweight and works well for handling multiple data sources. For the AI features like generating quizzes or giving career advice I will use **ChatGPT API** to provide smart, personalized recommendations

For the database, I will use **MongoDB**. It's flexible and fits well for storing user-specific data like skill assessments, project details, notes, certifications, and learning progress.

For authentication, I will use **Firebase Authentication**. It allows users to log in securely using email, Google, or GitHub, it gives us pre-built backend.

The dashboard will integrate with:

- **GitHub API** – to fetch Ananya's recent projects and repositories.
- **Google Calendar API** – to schedule learning sessions and send reminders.
- **ChatGPT API** – to create personalized quizzes and suggestions based on learning activity.

Data Sources

In the **settings** section of the dashboard, there will be options for Ananya to connect her **GitHub**, **Coursera**, **Udemy**, and other learning platforms. Once she gives access, Learner's Compass will use their official **APIs** to fetch the required data — like her completed courses, certifications, and public projects. This will help us automatically update her skills, learning timeline, and project showcase without her needing to add everything manually. All access will be with her permission and fully secure.