Recommender System

- About the Instructor
- About AI Science
- Descriptive Course Outline

- Shahzaib Hamid
  AI Sciences Instructor

Instructor

- Shahzaib Hamid, Ph.D. Scholar
- 7 Years in Academia and Industry
- AI Consultant
- Lecturer, Superior University Lahore, Pakistan
- Vast Experience in Multiple AI based R&D Fields
- R&D Interests Include, Data Science & Analysis, Computer Vision, NLP, Reinforcement Learning, Applied Machine Learning and Data Engineering in Industry Oriented Problem Solving

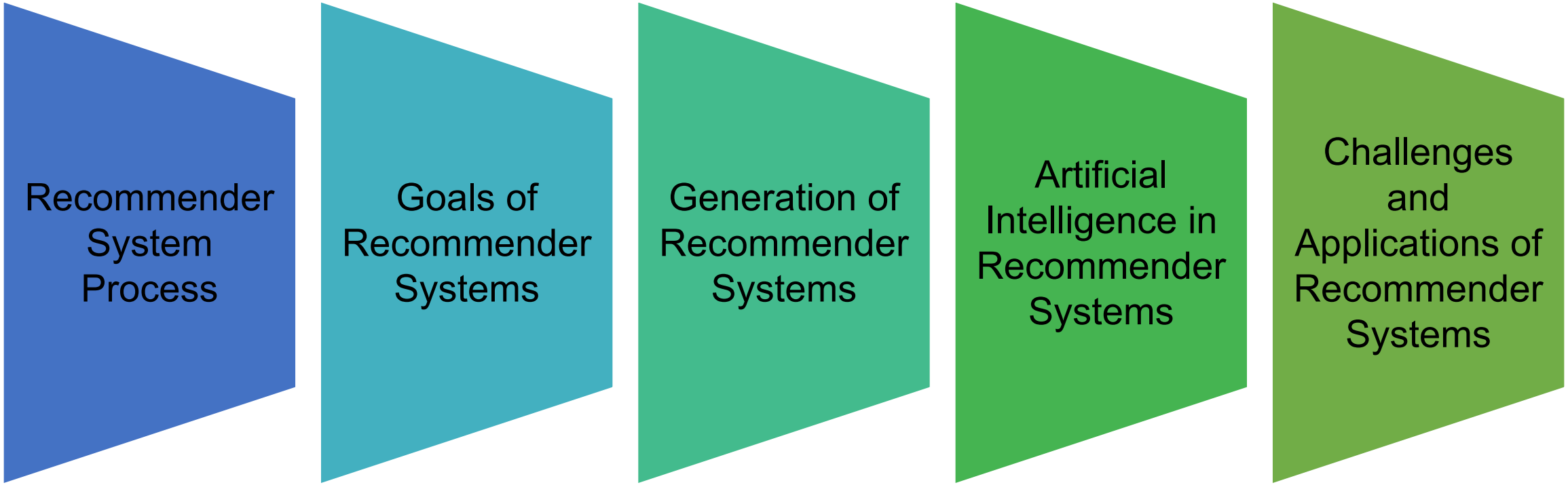
AI Sciences

- Group of Ph.Ds. and AI practitioners
- More than 39000 students on Udemy
- More than 80% courses have +4.5 rating
- Prepare you to solve digital problems
- Courses dedicated to beginners and new commers
- Core Focus: Machine Learning, Artificial Intelligence, Statistics and Data Science

In this Course

- Overview of Recommender Systems
- Fundamentals of Recommender Systems
- Machine Learning Based Recommender Systems with Python
  - Hands on Practice for Content based Recommender Systems using Machine Learning
  - Hands on Practice for Collaborative Filtering based Recommender Systems using Machine Learning
- Project 1: Songs Recommendation System using Machine Learning Algorithm
- Project 2: Movie Recommendation System using Machine Learning Algorithm

Overview of Recommender Systems



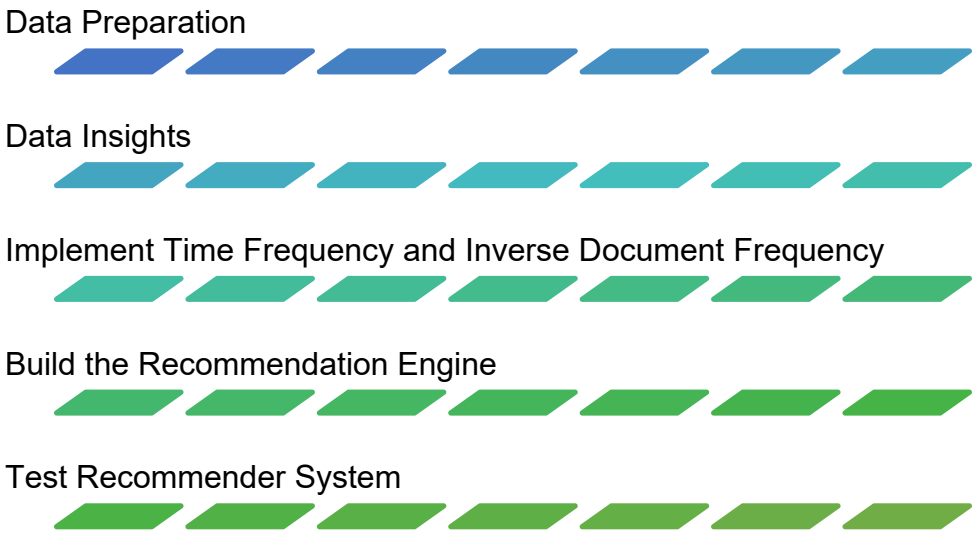
Fundamentals of Recommender Systems

- Taxonomy of Recommender Systems
- Item-context and User Rating Matrix
- Quality of Recommender Systems
- Online and Offline Evaluation Techniques
- Content Based Filtering
- Collaborative Filtering
  - User Based Filtering
  - Item Based Filtering
  - Model Based Filtering

Machine Learning Based Recommender Systems with Python

- Design Approaches for Machine Learning

Content based Recommender System with Machine learning and Python



Collaborative filtering-based Recommender System with Machine Learning and Python

Hand on Projects for Recommender Systems with Machine Learning

Project 1: Songs Recommendation Systems with Machine Learning and Python

Data Preparation

Data Insights and Visualization

Implement Time Frequency and Inverse Document Frequency

Build the Recommendation Engine

Test Recommender System

Project 2: Movie Recommendation System with Machine Learning and Python

Data Preparation

Data Insights

Implement k-Nearest Neighbors

Build the Recommendation Engine

Test Recommender System