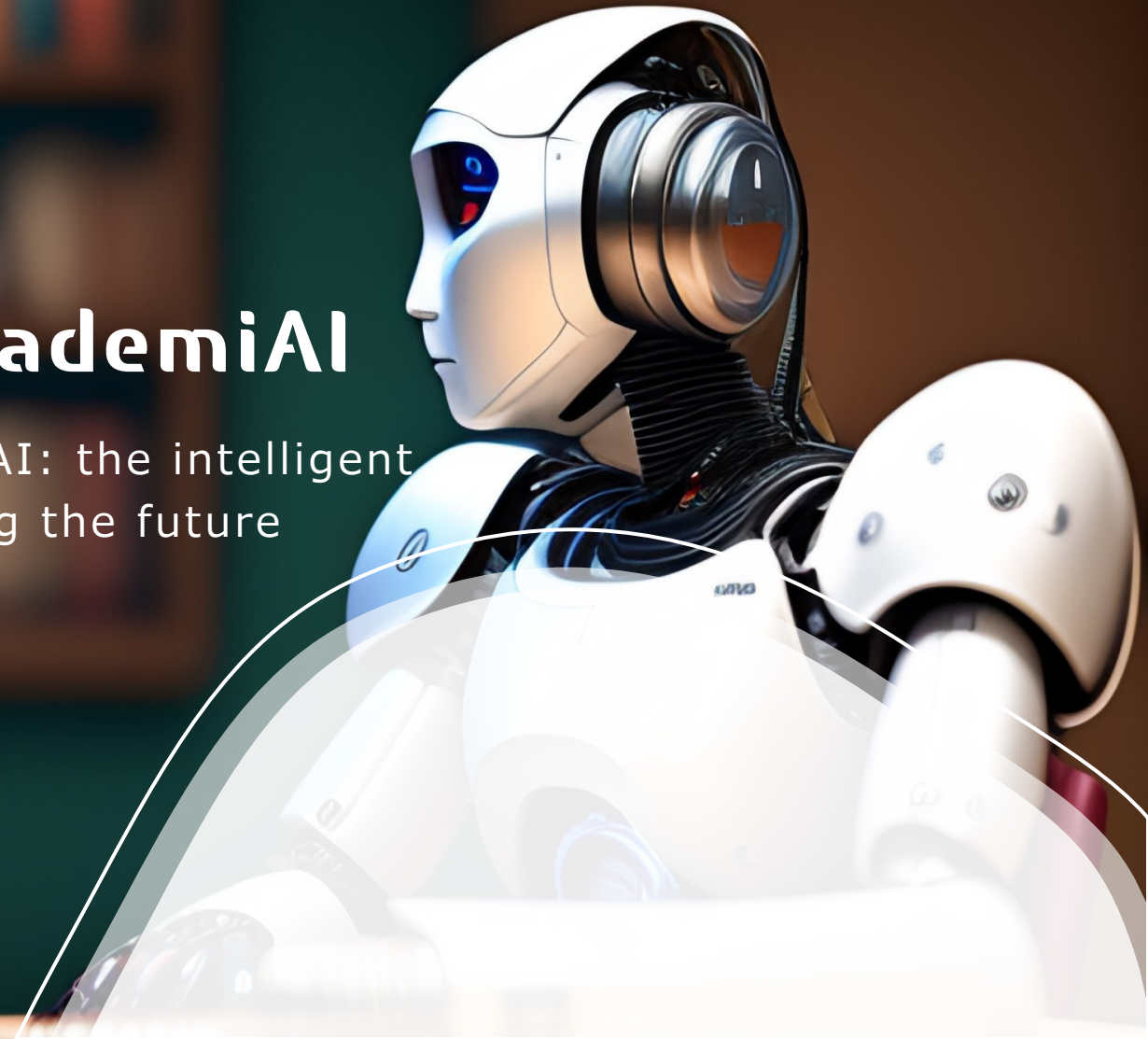


Team BitMinds:

Venkat Rebba, Rohan Goli, Jeevana Rao Talagana, Raju Manukonda

Project: AcademiAI

Adaptive Learning with AI: the intelligent
Ed-Tech platform shaping the future



Outline

- Challenges in EdTech
- Motivation
- Solution Proposal
- Developed Solution
- The Future



Current Challenges

Limited Personalization

- ❑ Cannot effectively address the unique learning styles and pace of the individual students
- ❑ People lag despite having the potential.

Engagement, Motivation and Resource Limitation

- ❑ Staying engaged due to a lack of interactive and immersive learning experiences
- ❑ Providing adequate resources and support for every student given the current pace of AI advancement





Traditional one-size-fits-all approaches often fail to meet the diverse learning needs of students.



Leveraging AI to personalize and enhance the learning experience.



Tailored content, pace, and assessment to the individual learners, maximizing their potential.

Motivation



Proposed Solution : AI based Adaptive Learning Platform

Our proposed solution harnesses the power of AI/ML to personalize education.



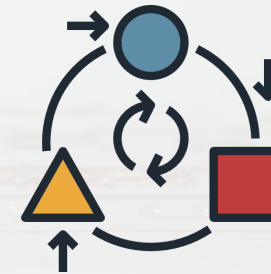
Personalized Learning Path



Intelligent Assessment



Interactive Experiences



Adaptive Content

Solution Architecture

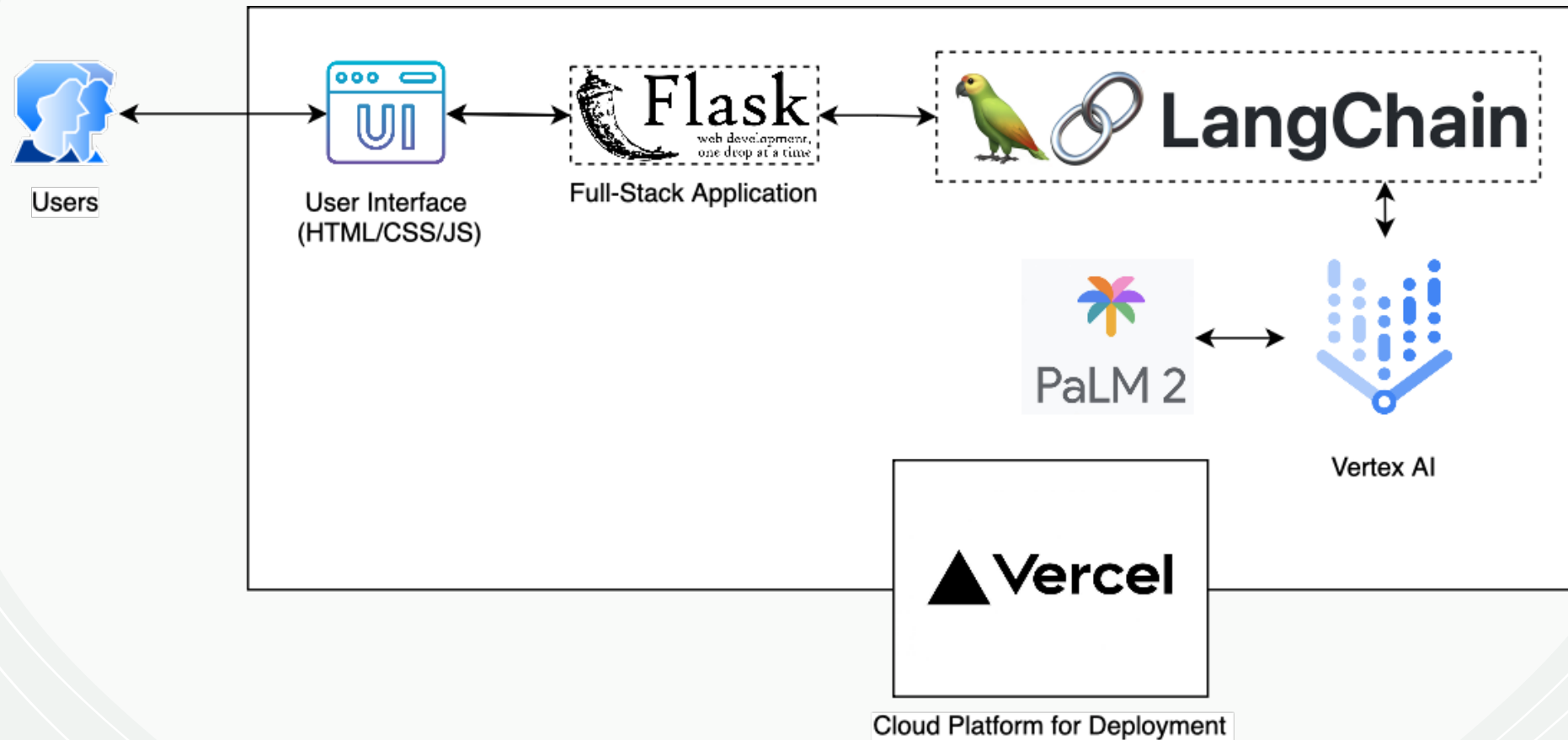


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Chapter 6: Reinforcement Learning

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What is Machine Learning?

Loading...

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What is Machine Learning?

**What is Machine Learning?*

Machine learning is the science of computers to perform tasks by fee

Machine learning is a subfield of a algorithms are typically trained on

Machine learning algorithms can b

- * Predicting customer behavior
- * Detecting fraud
- * Classifying images
- * Translating languages
- * Generating text
- * Playing games

Machine learning is a rapidly grow

Supervised Learning

In supervised learning, the computer is given a set of labeled data, and it learns to map the input data to the output labels. For example, if you have a dataset of images of cats and dogs, you can train a supervised learning algorithm to classify new images as either cats or dogs.

Supervised learning algorithms are typically used for tasks where the output labels are known. For example, you can use supervised learning to classify images, predict customer behavior, or detect fraud.

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Chapter 8: Generative Models

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a robot that is trying to learn how to walk, you can use reinforcement learning to train it to take the steps that will allow

Reinforcement learning algorithms are typically used for tasks where the goal is to maximize a reward. For example, y learning to train robots, play games, or control autonomous vehicles.

Examples of Machine Learning

Here are some examples of machine learning in action:

- * Google uses machine learning to power its search engine. The algorithm learns to rank web pages based on their re
- * Amazon uses machine learning to recommend products. The algorithm learns to predict which product
- * Netflix uses machine learning to recommend movies. The algorithm learns to predict which users. The algorithm learns to predict which
- * Facebook uses machine learning to detect spam and take news. The algorithm learns to identify content that is harmful or misleading.

127.0.0.1:3000

Valid answer +10 points! Your current score: 10

OK

Machine learning is a powerful tool that is being used to solve a wide variety of problems. As the field continues to gro more innovative applications of machine learning in the future.

Quiz

What is machine learning?

- The science of getting computers to learn without being explicitly programmed
- The science of getting computers to learn by being explicitly programmed
- The science of getting computers to learn by being explicitly programmed
- The science of getting computers to learn by being explicitly programmed

Submit

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Unsupervised Learning

Unsupervised Learning

In unsupervised learning, the goal is to learn from data without labels. This is in contrast to supervised learning, which involves learning from data with labels.

Unsupervised learning is often used for tasks such as clustering, dimensionality reduction, and anomaly detection.

Examples of Unsupervised Learning

Anomaly Detection

Anomaly detection is the task of identifying data points that are unusual or unexpected.

Anomaly detection is often used for tasks such as fraud detection, intrusion detection, and fault detection.

There are many different anomaly detection algorithms, each with its own strengths and weaknesses. Some popular anomaly detection algorithms include one-class support vector machines (OCSVMs), isolation forests, and local outlier factor (LOF).

Examples of Unsupervised Learning

Here are some examples of unsupervised learning:

- * Clustering: Google uses clustering to group users into different groups based on their online behavior. This allows Google to provide users with more relevant and personalized content.
- * Dimensionality reduction: Netflix uses dimensionality reduction to reduce the number of features in its movie recommendation dataset. This allows Netflix to recommend movies more efficiently.
- * Anomaly detection: Amazon uses anomaly detection to identify fraudulent transactions. This helps Amazon to protect its customers from fraud.

Quiz

What is unsupervised learning?

- A type of machine learning that learns from data without labels.
- A type of machine learning that learns from data with labels.
- A type of machine learning that learns from data with unlabeled data.
- A type of machine learning that learns from data with labeled data.

Submit

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Submit

127.0.0.1:3000
Invalid answer -10 points! Your current score: 0
OK

Benefits of Solution

- Improved learning outcomes
- Increased accessibility
- Enhanced engagement
- Centralized Learning Experience
- High-Level multi-lingual summarization of Collection of Books pertaining to domain.



- Federated Learning to cater individuals.
- Video (Sign Language) or Voice Assisted teaching for accessibility learners.
- Interactive Q&A with Video Avatars
- Oral / Body-Language assessment for soft-skill related assessments.
- Digital Avatar based mock-interviews.





Questions?

Thank you!

AcademiAI : The future of learning is here

