Applied AI : Quick Start to Building AI-Driven, Intelligent Web Applications - TTAI2361

Master AI Insights! Dive into Integrating AI and Web Development to Create Responsive and Individualized User Experiences

Duration: 2 Days
Skill Level: Intermediate
Available Format: Instructor-Led Online; Instructor-Led, Onsite In Person ; Blended; On Public Schedule

Our Quick Start to Building AI-Driven Intelligent Web Applications invites you on an immersive journey, blending the dynamism of web development with the intelligence of AI.

What You'll Learn

Overview

In today's digital age, the most engaging web applications leverage the transformative power of AI to offer responsive and individualized user experiences. Our **Quick Start to Building AI-Driven Intelligent Web Applications** invites you on an immersive journey, blending the dynamism of web development with the intelligence of AI. By delving into this synergy, you'll be well equipped to craft digital interfaces that not only enhance user engagement but also align seamlessly with business objectives, marking a pioneering stride into the future of intuitive and tailored web interactions.

Over two days, we'll delve into essential topics such as:

- **Intelligent Web Design:** Understand the foundation and intricacies of smart algorithms to craft intuitive web applications.
- **Data Patterns:** Decode and utilize data to make informed decisions for your AI integrations.

- **Tailored Content Suggestions:** Discover the mechanisms behind recommendation systems, offering users content that truly resonates.
- **Efficient Sorting:** Grasp advanced sorting techniques to streamline data processing and enhance user experience.
- **Ad Click Predictions:** Learn to forecast user behaviors, optimizing ad placements for better engagement.
- **Neural Connectivity:** Dive into the world of neural networks, understanding the core of AI's decision-making capabilities.

The course focuses heavily on practical real-world scenario-based hands-on labs, providing you with ample practice to apply your newly learned skills to real projects under the valuable guidance of our AI expert instructor. You'll apply critical concepts in real-time, from content recommendation to user behavior predictions. By the end of this course, you'll be equipped with the knowledge and practical skills to integrate AI into your web applications, making them not only functional but also intelligent and user-centric.

Objectives

This course combines engaging instructor-led presentations and useful demonstrations with valuable hands-on labs and engaging group activities. Equipped with these skills, you'll be set to infuse AI magic into your web creations, making them more intuitive, dynamic, and user-friendly.

Working in a hands-on learning environment led by our engaging AI expert you'll learn to:

- **Decipher Smart Algorithms:** Grasp the core concepts behind intelligent web design, enabling you to weave smart algorithms seamlessly into your web applications for enhanced user experiences.
- **Navigate Data with Confidence:** Delve deep into data transformation and grouping, helping you identify and interpret patterns, and ensuring your AI solutions are grounded in solid data science.
- **Craft Personalized Content Recommendations:** Develop a keen understanding of content suggestion systems, empowering you to curate web content that resonates with individual users.

- **Master the Art of Sorting:** Get hands-on with various item sorting techniques, ensuring that every piece of data finds its rightful place, and enhancing the efficiency and accuracy of your AI web applications.
- **Predict with Precision:** Uncover the secrets of forecasting online advertisement clicks. By the end of the course, you'll be equipped to anticipate user behaviors, optimizing ad placements and driving engagement.
- **Harness Advanced Neural Networks:** Take a deep dive into the interconnected world of neural systems. By understanding layers, perceptrons, and error correction methods, you'll be ready to craft sophisticated AI-driven solutions for your web projects.

If your team requires different topics, additional skills or a custom approach, our team will collaborate with you to adjust the course to focus on your specific learning objectives and goals.

Audience

This Intermediate level course is geared for experienced technical professionals eager to meld the capabilities of AI with the dynamism of web applications. Roles might include experienced web developers, data analysts, machine learning engineers, UX Designers and digital product managers. If you're passionate about enhancing digital experiences, tailoring user interactions, or predicting online behaviors, this immersive journey into the intelligent web realm is tailor-made for you.

Pre-Requisites

To ensure a smooth learning experience and maximize the benefits of attending this course, you should have the following prerequisite skills:

- Basic Python Programming experience.
- Basic web development experience, working with HTML / CSS, etc.
- Comfort with elementary data concepts, such as databases, data structures, and basic data manipulation.

Next Steps / Follow-on Courses: We offer a wide varietyof follow-on courses and learning paths for Generative AI, AI for Business, GPT, Applied AI, Azure OpenAI, Google BARD, AI for developers, testers, data analytics, machine learning, deep learning, programming, intelligent

automation and many other related topics. Please see our catalog for the current **AI & Machine Learning Courses, Learning Journeys& Skills Roadmaps**, list courses and programs.

TTML5503	Introduction to AI & Machine Learning JumpStart
TTPS4876	Next-Level (Intermediate) Python for Data Science and /or Machine Learning
TTPS4878	Hands-On Data Analysis with Panda
TTAI2062	Transforming Customer Support with AI: Crafting Custom Assistants for Your Business

Agenda

Please note that this topics, agenda and labs are subject to change to cover the most recent technical trends or tools, and may adjust during live delivery based on audience skill level, interests and participation.

Intelligent Web Design and Implementation

- A Glimpse of Smart Algorithms: An Insight into Google Now
- The Evolution and Phases of Smart Algorithms
- Additional Illustrations of Smart Algorithms
- Limitations and Misconceptions of Intelligent Apps
- Different Varieties and Types of Smart Algorithms
- Methods to Measure Intelligent Algorithm Effectiveness
- Crucial Considerations Regarding Smart Algorithms

Unraveling Patterns in Data: Transformation and Grouping

- Understanding the Core Elements, Skewness, and Unsystematic Fluctuations in Data
- Navigating through High-Dimensional Data Spaces
- Methodology of Grouping Using K-means
- Linking k-means Techniques with Gaussian Mixtures
- Modifying and Refining the Data Dimensions

Tailored Content Suggestions and Recommendations

- Scene Setting: Digital Film Shopping Platform

- Comparative Metrics and Similarity in Content
- Inside the Mechanics of Content Suggestion Systems
- User-Centric Filtering Approaches
- Mathematical Decomposition in Content Suggestions
- The Race to Win the Netflix Challenge
- Evaluative Metrics for Recommendation Systems

Item Sorting: Guiding Entities to Their Proper Locations

- Recognizing the Importance of Sorting
- A Brief Look at Various Sorting Techniques
- Algorithmic Procedures
- Unmasking Fraud Through Logistic Models
- How Trustworthy are the Outcomes?
- Dealing with Extensive Sorting Datasets

A Detailed Examination: Online Advertisement Click Forecasts

- Tracing the Roots and Framework
- The Mechanism of Trade
- Explaining the Role of a Bidding Participant
- Deciphering Decision-Making Engines
- Predicting Clicks Using Specific Algorithms
- Challenges in Assembling a Decision-Making Mechanism
- The Upcoming Era of Instantaneous Forecasts

Exploring Neural Connectivity and Advanced Learning Techniques

- A Layman's Guide to Sophisticated Learning
- Architecture of Interconnected Neural Systems
- Understanding the Simplest Neural Unit: Perceptron
- Layers of Connected Perceptrons
- Learning through Error Correction Methods
- Beyond Traditional Networks: A Journey into Advanced Learning

Decision Making: Selecting the Optimal Path

- Comparative Analysis through A/B Testing
- Exploring the Complexities of Multi-Option Scenarios
- Real-Life Uses of Probabilistic Selection Methods
- A/B Tests vs. Probabilistic Selection: A Contrast
- Expanding on Multi-Option Selection Strategies

The Road Ahead for Smart Web Technology

- The Role of ChatGPT and Other Comprehensive Language Processors

Related Courses

TTPS4879	Hands-On Predictive Analytics with Python

All applicable course software, digital courseware files or course notes, labs, data sets and solutions, live coaching support channels and rich extended learning and post training resources are provided for you in our â€œeasy access, no install requiredâ€• online **Learning Experience Platform (LXP),** remote lab and content environment. Access periods vary by course. Weâ€™ll collaborate with you to ensure your team is set up and ready to go well in advance of the class.

For More Information

Please contact us or call 844-475-4559 toll free for more information about our training services (instructor-led, self-paced or blended), coaching and mentoring services, public course enrollment or questions, partner programs, courseware licensing options and more.