



# BECOME A CERTIFIED AI ENGINEER

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# Partners' Introduction



**MR  
MUHAMMAD  
ABBAS**  
FOUNDER  
365 BOOT CAMP  
PARENT OF ANALYTIX CAMP

Muhammad Abbas is a data analytics expert with **7+ years** of experience working with multinational companies across Spain, Germany, and the USA. He is the Founder of 365 Boot Camp and Analytix Camp, dedicated to training professionals in practical data analysis skills.

A Certified **Microsoft Power BI Data Analyst** Associate, Abbas specializes in **Excel, Power BI, Python, and SQL**. He also shares free tutorials on his YouTube channel, Abbas Imami. Under his leadership, Analytix Camp has become a go-to platform for hands-on, real-world data analytics training. His mission is to build a generation of data-literate professionals ready to turn insights into action.



**MR  
ALI NAWAZ**  
CO-FOUNDER  
365 BOOT CAMP

Ali Nawaz, Co-Founder of 365 Boot Camp, is a seasoned finance professional with 15+ years of experience in Treasury, Investment Research, and Capital Markets. He is the **CEO of Chase Securities** and formerly served as SVP – Global Markets at **Samba Bank** (a Saudi National Bank subsidiary).

His career spans key roles at **Silk Bank and Alfalah GHP Investment** Management. Holding a Master's in Finance, MS in Management Science, and a Portfolio Management certification from the Canadian Securities Institute, Ali is currently pursuing a Ph.D. in Economics. At 365 Boot Camp, he drives the strategic vision, empowering professionals with cutting-edge skills in data analytics and business intelligence.



**MR  
MUSLIM  
RAZA**  
CO-FOUNDER  
365 BOOT CAMP

Mr. Muslim Raza is the Co-Founder of 365 Boot Camp and CEO of Thrive Studio, a leading tech venture capital firm. With a strong background in public and private equity, he also oversees his family office investments.

Formerly the Provincial **Chief of SMEDA (Sindh & Balochistan)**, he played a key role in scaling SMEs. An MBA graduate from IBA, Mr. Raza mentors startups and shares his expertise through pro bono consultancy. At 365 Boot Camp, he is committed to training future data professionals with real-world skills.



## About Us:

365 Boot Camp is a leading training institute dedicated to equipping individuals with the analytical skills needed to excel in today's data-driven world. We specialize in teaching a wide range of analysis disciplines, including Financial Analysis, Financial Reporting, Data Analysis, Business Analysis, and Business Intelligence, Data Science, and Artificial Intelligence. Our courses cover essential tools like Power BI, SQL, Tableau, Python, Excel, Machine Learning (ML), Deep Learning (DL), Natural Language Processing (NLP), Large Language Models (LLM), Artificial Intelligence (AI), Hugging Face, and LangChain.



## Our Mission

Our mission is to empower our students with practical, real-world skills that are immediately applicable in the workplace. Whether you're a beginner or looking to advance your career, 365 Boot Camp offers a supportive learning environment with expert instructors who are passionate about helping you succeed. Join us and start transforming data into insights today.

## Our Story

365 Boot Camp was founded with a vision to empower individuals with the skills needed to thrive in a data-driven world. We believe in turning raw data into powerful insights and training future analysts through practical, hands-on learning. From beginners to professionals, we guide every learner toward real-world success.



## Our Mentors

### Shahzeb Malik

**Data Scientist (05+ Years)**

**Manager Data Science Unit – AVP, Bank Alfalah Limited**



Introducing Muhammad Shahzeb Malik, a dynamic professional with a solid background in Computer Engineering from Istanbul Bilgi University, Turkey, and a passion for Data Science. Currently pursuing a Level 7 Diploma in Data Science from Qualifi Ltd., UK, Muhammad has demonstrated his expertise through impactful roles at organizations like Bank Alfalah, Daraz, and FoodPanda. With notable achievements, including the Rockstar Award (Daraz), Shining Star Award (FoodPanda), and Alfa Mall Appreciation Award (Bank Alfalah), Muhammad is committed to making a difference in the world of data.

 <https://www.linkedin.com/in/shahzeb-malik-32a107194/>

### Muhammad Anas

**Business Intelligence Analyst (6+ Years)**

**Business Intelligence Consultant Lead –  
BluTech Consulting**



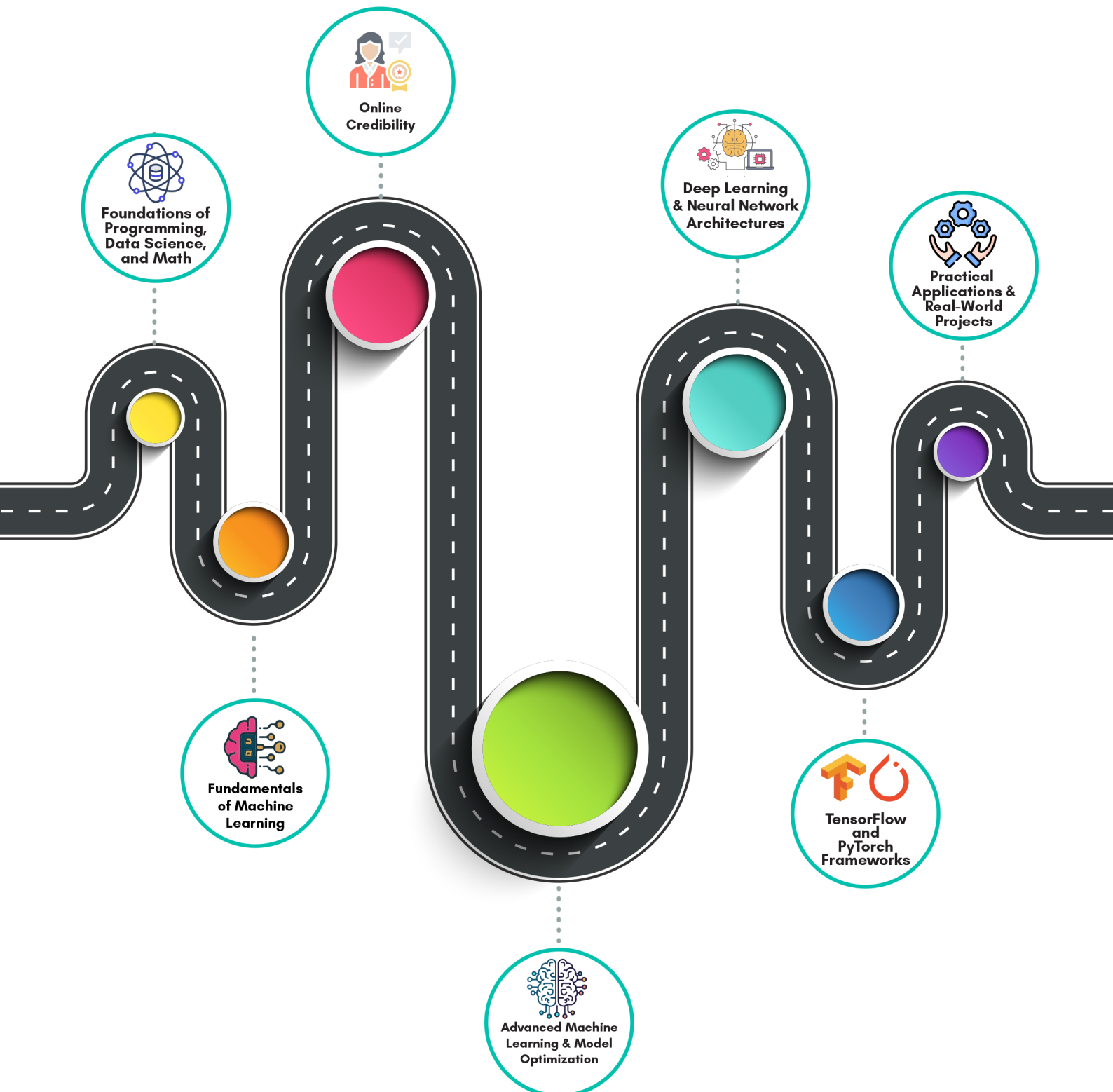
Muhammad Anas, a seasoned professional with a Master's in Data Science from SZABIST, is the Business Intelligence Consultant Lead at BluTech Consulting. He has held roles such as Assistant Manager – Data Science at Bank Alfalah and IT Executive at International Steels Limited. His expertise bridges business intelligence and data science, providing practical insights. With a proven track record at top organizations, Muhammad empowers aspiring professionals to apply theoretical knowledge in real-world scenarios, making him a highly sought after instructor.

 <https://www.linkedin.com/in/muhammad-anas-622961184/>



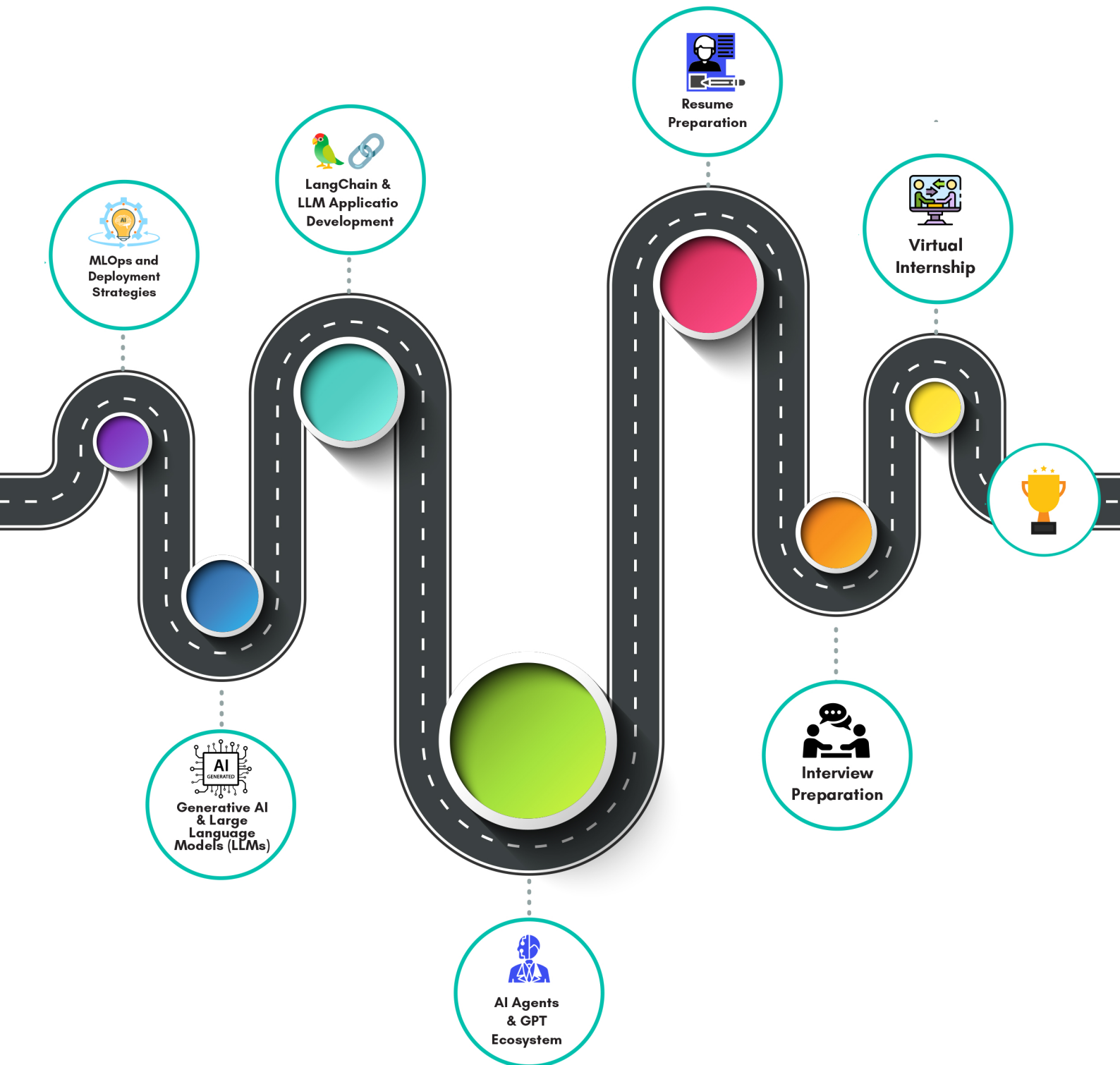
# The Roadmap to Become a AI Engineer

## With Practical Job Assistance + AI Module



# The Roadmap to Become a AI Engineer

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# 15 Career Tracks To Pursue After Becoming A Certified AI Engineer



## AI Research Scientist

**Job Role:** Conduct experimental research, develop new algorithms, and push the boundaries of AI theory and application.

**Why Hire:** They drive innovation and create foundational technologies that can provide a competitive edge.



## Machine Learning Engineer

**Job Role:** Design, build, and deploy machine learning models into production environments.

**Why Hire:** They transform theoretical models into scalable solutions that improve efficiency and automate processes.



## Data Scientist

**Job Role:** Analyze complex data sets, extract meaningful insights, and build predictive models to support business decisions.

**Why Hire:** They convert raw data into actionable intelligence, fueling data-driven strategies.



## AI Consultant

**Job Role:** Advise organizations on AI adoption, strategy, and integration with existing systems.

**Why Hire:** They provide tailored expertise to help organizations overcome AI implementation challenges and maximize ROI.



## AI Solutions Architect

**Job Role:** Design end-to-end AI systems, ensuring smooth integration across platforms and alignment with business needs.

**Why Hire:** They build robust, scalable frameworks that facilitate efficient deployment.



## AI Product Manager

**Job Role:** Lead the ideation, development, and lifecycle management of AI-powered products.

**Why Hire:** They act as a bridge between technical teams and market demands, ensuring products are both innovative and commercially viable.



## Generative AI Developer

**Job Role:** Develop and refine models that generate creative content, such as text, images, or music.

**Why Hire:** They unlock innovative avenues for content creation, personalization, and customer engagement.



## MLOps Engineer

**Job Role:** Oversee the operational lifecycle of ML models, including deployment, monitoring, and continuous improvement.

**Why Hire:** They ensure AI systems are reliable, efficient, and scalable—minimizing downtime and operational risk.



## AI Business Analyst

**Job Role:** Evaluate business processes, identify opportunities for AI integration, and translate business requirements into technical specifications.

**Why Hire:** They ensure that AI initiatives are aligned with strategic business objectives, delivering measurable impact and ROI.



## AI Educator/Trainer

**Job Role:** Develop algorithms that enable machines to interpret and process visual data, such as images and videos.

**Why Hire:** They enable automation and enhance accuracy in sectors like healthcare, security, and manufacturing through advanced image analysis.



## Computer Vision Engineer

**Job Role:** Develop algorithms that enable machines to interpret and process visual data, such as images and videos.

**Why Hire:** They enable automation and enhance accuracy in sectors like healthcare, security, and manufacturing through advanced image analysis.





## Natural Language Processing (NLP)

**Job Role:** Build systems that understand and generate human language, powering chatbots, translation tools, and sentiment analysis.

**Why Hire:** They enhance user experiences by creating smarter, more intuitive communication interfaces.



## Reinforcement Learning Specialist

**Job Role:** Design systems that learn optimal actions through trial-and-error, adapting to dynamic environments.

**Why Hire:** They drive the development of adaptive, efficient AI solutions for complex, real-world challenges.



## AI Entrepreneur/Start-Up Founder

**Job Role:** Launch and lead ventures that leverage AI technologies to address market gaps and create innovative solutions.

**Why Hire:** They combine technical acumen with entrepreneurial vision to foster disruptive innovation and growth.



## AI Business Analyst

**Job Role:** Evaluate business processes, identify opportunities for AI integration, and translate business requirements into technical specifications.

**Why Hire:** They ensure that AI initiatives are aligned with strategic business objectives, delivering measurable impact and ROI.



## AI Marketing Specialist

**Job Role:** Integrate AI into marketing strategies optimizing campaigns, targeting audiences, and analyzing consumer behavior.

**Why Hire:** They bring a data-driven approach that enhances customer acquisition and retention through personalized and automated marketing efforts.

# WHY THIS IS THE MOST EFFECTIVE BOOTCAMP ON THIS PLANET

We respect your time and money; hence we advise you to consult with the Course Instructor first before enrolling in our Course.

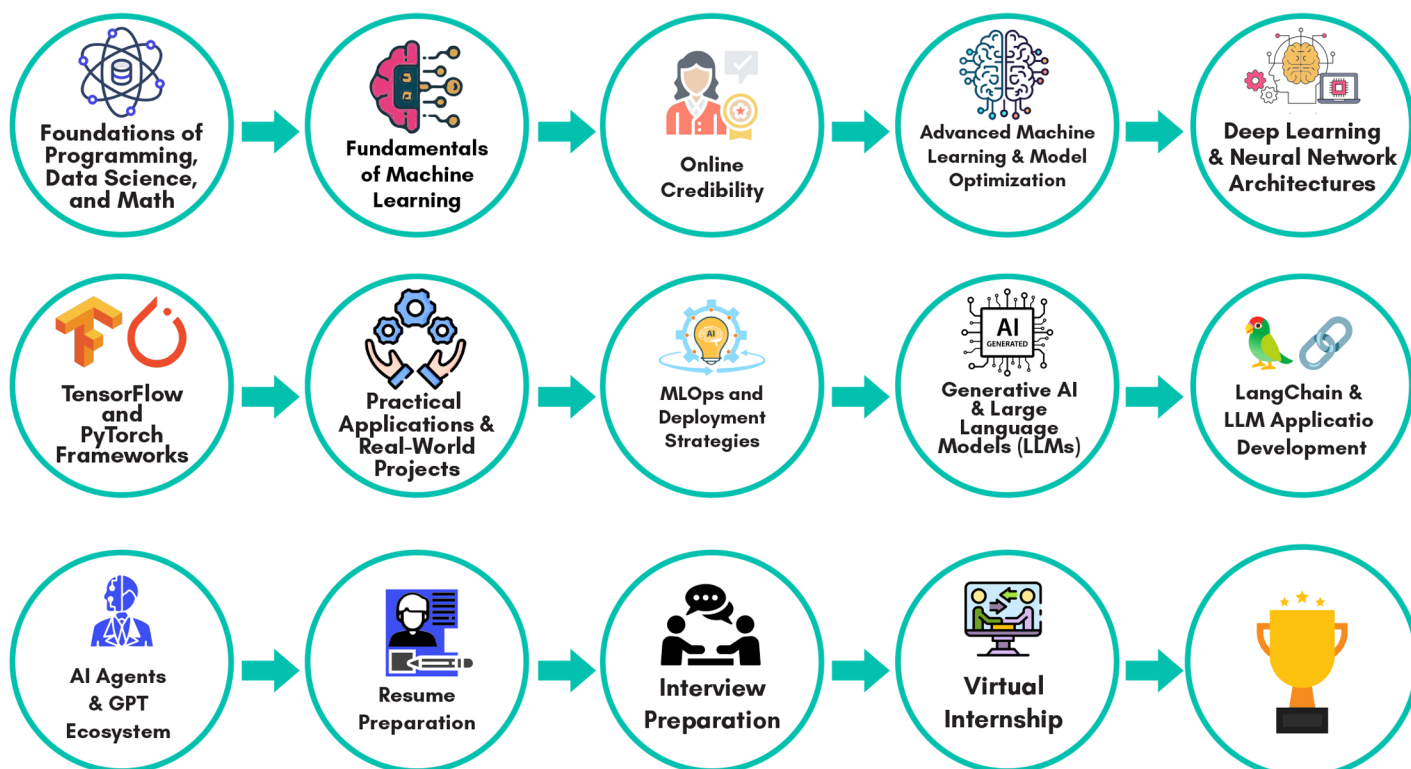
We offer unlimited Chat Support for doubt clearing through our WhatsApp Group.

The Projects you will be working on will be related to building AI Agents, Object Detection, Image Classification, ChatBot, Automated Financial Reports and many more to help you understand the Market.

We provide comprehensive practical job assistance that includes Resume and Interview preparation, Virtual Internship, and building Online Credibility

You will experience highly engaging content that provides a cinematic feel, real world business practice problems and interactive business meetings.

In this Bootcamp, you won't be working on only sample datasets instead, you'll work on real world Company Models.



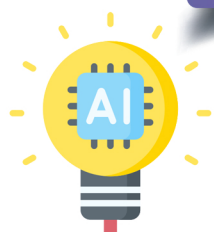


# Our Participants Belong to:



# Training Outline:

## Module 01



## Artificial Intelligence Fundamentals

### 01 Introduction to AI

Kick off your AI journey with a hands on demonstration that shows you how to build a simple AI tool in under five minutes. You'll get a clear overview of what this course covers and learn to distinguish natural intelligence from its artificial counterpart. We'll trace AI's evolution through a concise history overview, then demystify how AI relates to data science, machine learning, and deep learning. Finally, you'll explore the difference between weak and strong AI, equipping you with the foundational concepts needed to dive deeper into the field.

### 02 Data Is Essential for Building AI

Data fuels every AI solution, so you'll start by distinguishing structured from unstructured data and learning how to collect it effectively. We'll explore the nuances of labeled versus unlabeled datasets and uncover the power of metadata—data that describes your data—to streamline preprocessing and analysis.

### 03 Key AI Techniques

Delve into the core methods powering AI today: machine learning's algorithms and workflows, the spectrum of supervised, unsupervised, and reinforcement learning paradigms, and the role of deep learning's neural networks in tackling complex, high dimensional tasks.

### 04 Important AI Branches

Survey the major domains where AI makes an impact: the physical autonomy of robotics, the image and video understanding of computer vision, tried and true traditional machine learning, and the rapidly evolving field of generative AI crafting new content from text to images

## 06 Understanding Generative AI

Trace the rise of generative AI, from early NLP approaches to today's Large Language Models like ChatGPT. You'll compare "buy" versus "make" strategies for foundation and private models, examine NLP's journey from n grams through RNNs to transformers, and learn LLM construction phases—from data curation to training efficiency (supervised vs. semi supervised). Finally, you'll distinguish prompt engineering, fine tuning, and retrieval augmented generation (RAG), and understand why foundation models underpin modern AI.

### Module 02



## Python Programming

## 01 Python Fundamentals:

Begin your Python journey understanding its dominance in AI and data fields due to exceptional readability, vast libraries (like NumPy, Pandas), and a vibrant ecosystem. Start by setting up your environment using Anaconda to manage packages and Jupyter Notebooks for interactive coding (.ipynb files). Grasp fundamentals like variables storing diverse data types (strings, numbers, Booleans), essential syntax (arithmetic, comparisons ==, variable reassignment, comments, indentation), and operators (comparison, logical and/or, identity is). Control program flow with if/elif/else statements and loops (for iterating sequences, while). Encapsulate reusable logic by defining functions (with/without parameters), and manage collections using sequences: mutable lists, immutable tuples, and key-value dictionaries (including slicing and methods). Finally, explore key concepts like object-oriented programming, organizing code into modules/packages, leveraging the Python Standard Library, and documentation best practices to build professional, collaborative projects.

## 02 Data Science Environment Setup

Lay the groundwork for all your data projects by getting to know the essential tools and workflows. We begin with an overview of our environment, then introduce you to package management with Conda, explaining what it is and how to create isolated environments on both macOS and Windows. You'll walk through setting up Jupyter Notebooks step by step, from installation to launching, using shortcuts, troubleshooting errors, and restarting kernels. By the end of this module, you'll have a stable, reproducible setup that lets you focus on analysis rather than configuration.

## 03 Pandas Data Analysis

Dive into data manipulation with Pandas, one of Python's most powerful libraries for working with tabular data. You'll start by understanding Series and DataFrame structures and loading CSV files. From there, learn how to quickly summarize datasets using descriptive statistics, select and view subsets of your data, and apply transformations, filtering, sorting, and reshaping, to prepare information for analysis. Practical exercises and downloadable assignments reinforce each concept, ensuring you can confidently wrangle real world datasets.

## 04 NumPy

Build a solid mathematical foundation with NumPy's fast array operations. After an introductory overview, you'll explore data types and array attributes, create arrays from scratch, and control randomness with seeds. Learn to inspect and reshape your data, compute key statistics like standard deviation and variance, and distinguish dot products from element wise multiplication. Hands on exercises, such as analyzing sales figures or processing image data, help cement your understanding of NumPy's core capabilities.

## 06 Matplotlib Plotting & Data Visualization

Transform your data into clear, insightful graphics using Matplotlib. This module covers the essentials: importing the library, understanding figure anatomy, and generating basic scatter, bar, and histogram plots. You'll master subplot configurations, discover quick tips for effective visuals, and practice plotting directly from Pandas DataFrames across multiple scenarios. Finally, learn to customize every aspect of your plots, titles, labels, legends, and styling, and save or share your finished figures so you can present your findings with confidence.



## Module 03



## Machine Learning: Supervised Learning

### 01 Machine Learning: Classification

In this hands on project, you'll apply everything you've learned to a real world classification problem. After a brief module overview and project introduction, you'll set up your environment (with optional Windows instructions) and configure your machine learning framework. Next, dive into the dataset, exploring features and uncovering patterns across multiple walkthroughs. You'll then prepare your data for modeling, select appropriate algorithms, and run experiments to compare performance. Through iterative hyperparameter tuning and model refinement, you'll optimize your classifier, evaluate its accuracy across several metrics, and identify the most influential features driving predictions. Finally, you'll review your entire workflow to reinforce best practices in reproducible, end to end classification pipelines.

### 02 Machine Learning: Time Series

Tackle the unique challenges of sequential data in this comprehensive time series project. Starting with a module overview and project outline, you'll configure your development environment and framework. You'll explore temporal data through successive analyses, engineer time aware features, and convert timestamps into model ready numerical inputs. Learn strategies for handling missing values, both numerical and categorical—and split your dataset appropriately for forecasting tasks. You'll craft custom evaluation functions tailored to time series accuracy, reduce dimensionality, and leverage randomized search for hyperparameter optimization. In the final stages, you'll preprocess data pipelines, fit and fine tune your predictive model, generate forecasts, and analyze feature importances to understand the drivers of temporal trends.

## Module 04



### Machine Learning: Unsupervised Learning

#### 01 Getting Started

Set the stage for your data science journey with a clear introduction to the course. You'll learn about the series' scope and structure, meet the capstone project you'll tackle, and set realistic expectations for your progress. Finally, you'll install and launch Jupyter so you can begin writing and running code right away.

#### 02 Intro to Data Science

Dive into the fundamentals of data science: define what it is, explore the core skill set, and understand how machine learning fits into the broader workflow. You'll walk through each project phase—scoping, data gathering, cleaning, exploration, modeling, and insight sharing—spotlight common algorithms, and wrap up with key takeaways and an introduction to unsupervised learning.

#### 03 Unsupervised Learning 101

Discover the power of unsupervised techniques for uncovering hidden patterns in data. This module covers foundational concepts, common algorithms, and real world applications, lays out a step by step workflow, and highlights how unsupervised methods fit into your data science toolbox.

#### 04 Pre Modeling Data Prep

Prepare your dataset for modeling success by mastering data cleaning and feature engineering. You'll handle missing values, convert data types (numeric and datetime), extract and calculate new attributes, create dummy variables, and ensure correct row granularity. Advanced topics include identifying proxy variables, scaling (normalization and standardization), and selecting features—all reinforced with hands on demos and assignments.

## 06 Clustering

Learn to segment data into meaningful groups using clustering algorithms. You'll start with K Means—exploring inertia, silhouette scores, and tuning techniques—then move to hierarchical clustering and DBSCAN. Along the way, you'll visualize clusters, compare model performance, and practice labeling new data, so you can choose the best clustering strategy for any dataset.

## 06 Project: Clustering Clients

Put your clustering skills into practice on a client segmentation project. From data preparation through K Means, hierarchical, and DBSCAN implementations, you'll compare models, select the optimal approach, and deliver actionable client groupings and predictions.

## 07 Anomaly Detection

Identify outliers that signal fraud, defects, or rare events with anomaly detection methods. You'll cover basic principles and workflows, implement Isolation Forests and DBSCAN based detectors, visualize anomalies, and learn how to tune and interpret your models—culminating in a comparative review of techniques.

## 08 Dimension Reduction

Handle high dimensional data by learning why and how to reduce features. You'll explore Principal Component Analysis (PCA)—from explained variance to interpretation—then advance to  $t$  SNE for nonlinear embeddings. Through demos and assignments, you'll compare PCA vs.  $t$  SNE, integrate reduction with clustering, and master best practices for feature extraction.

## 07 Recommenders

Build personalized recommendation systems using both content based and collaborative filtering. You'll construct user item matrices, apply Singular Value Decomposition (SVD), compute cosine similarity, and combine approaches into hybrid models. Practical demos and assignments will guide you through each step, from component selection to final recommendations.

## 08 Project: Recommending Restaurants

Apply recommender techniques to a restaurant dataset: prepare your data, run Truncated SVD, calculate similarity scores, and generate scoped menu or venue suggestions—delivering a working recommendation engine from end to end

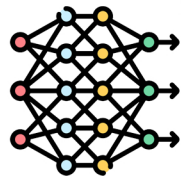
## 06 Unsupervised Learning Review

Consolidate your understanding of unsupervised methods with a high level flowchart of techniques, a recap of key applications, and guidance on where clustering and anomaly detection fit within the overall data science workflow.

## 06 Final Project

Bring together all your skills in a comprehensive capstone. You'll perform data prep and exploratory analysis, run clustering and PCA in multiple rounds, analyze cluster characteristics, and deliver final recommendations demonstrating a polished, end to end unsupervised learning solution.

# Module 05



## Deep Learning (DL)

### 01 Deep Learning Fundamentals

Begin with an introduction to Natural Language Processing within deep learning, contrasting feedforward neural networks (ANNs) with recurrent architectures (RNNs) so you understand why RNNs excel at sequential data.

### 02 Simple RNN In Depth Intuition

Delve into the mechanics of a simple RNN: follow forward propagation through time steps, unpack backpropagation through time, and recognize the challenges—like vanishing or exploding gradients—that arise when modeling long sequences.

### 03 ANN Project Implementation

Apply your knowledge in a hands on ANN project: define a classification problem, set up your VS Code environment, and transform features with scikit learn. You'll train your network step by step—tuning optimizers and loss functions—make predictions, and then integrate and deploy your model in a Streamlit web app.



## **End to End Deep Learning Projects with Simple RNN**

Build a complete RNN pipeline: start with embedding layers, implement word embeddings in TensorFlow/Keras, and load the IMDB dataset for sentiment analysis. After feature engineering and training your simple RNN, you'll deploy the model via Streamlit—creating a web app that demonstrates real time text predictions.

## **LSTM RNN In-Depth Intuition**

Explore why LSTMs solve RNN limitations by examining the full LSTM architecture—understanding each gate (forget, input, candidate memory, output)—and learn how training processes differ. You'll also survey architectural variants and compare LSTM to GRU designs.

## **LSTM and GRU End-to-End Deep Learning Project: Predicting Next Word**

Tackle a next word prediction challenge: outline the problem, collect and preprocess text data, and train an LSTM network. You'll generate predictions, integrate the model into a Streamlit app, and implement the GRU variant to compare performance.

## **Bidirectional RNN In-Depth Intuition**

Understand the advantages of bidirectional RNNs—how they process sequences forward and backward—to capture context from both directions and improve sequence modeling tasks.

## **Encoder-Decoder Sequence to Sequence Architecture**

Gain deep intuition on the encoder-decoder framework: learn how sequence to sequence models encode inputs into fixed representations and decode them into outputs, and recognize common pitfalls in this architecture.

## **Attention Mechanism – Seq2Seq Networks**

Cap off your journey by exploring attention mechanisms within Seq2Seq models. You'll dive into the architecture that lets models focus on relevant input tokens at each decoding step, dramatically boosting translation, summarization, and other sequence generation tasks.

# Training Outline:

## Module 06



## Natural Language Processing & LLM

### 01 **Build Your First LLM Product: Exploring Top Models & Transformers**

Jump straight into LLM engineering with hands on demos and environment setup. You'll begin by deploying Ollama locally on Windows and macOS and building a simple Spanish tutoring LLM. You'll have created your own AI powered web page summarizer using GPT 4 and BeautifulSoup, and you'll wrap up with key takeaways to solidify your learning. You'll compare frontier models like GPT, Claude, Gemini, and LLAMA; experiment with multi shot prompting and Canvas features; and evaluate cost, context window limits, and model performance across different business use cases, from tokenization and context windows to parameter scaling and API pricing.

### 02 **Build a Multi-Modal Chatbot: LLMs, Gradio UI, and Agents in Action**

Advance from single model demos to multi model, multimodal applications using Gradio and agent frameworks. You'll start by integrating OpenAI, Claude, and Gemini APIs streaming real time responses and crafting adversarial AI dialogues. Next, learn to prototype interactive chat UIs in Gradio, implement function calling with OpenAI for an AI airline assistant, and empower LLMs to run custom code on your machine. Day5 brings multimodal capabilities: you'll incorporate DALL·E3 image generation, audio tools, and build a full multimodal AI agent that can see, hear, and converse demonstrating a production ready chatbot capable of handling text, images, and sound.



## Open-Source GenAI: Building Automated Solutions with HuggingFace

Shift your focus to the open source ecosystem and cloud notebooks. You'll explore the HuggingFace Hub models, datasets, and Spaces—and set up secure Google Colab environments. Through pipeline tutorials, you'll run inference on popular transformers, compare tokenizers (LLAMA, PHI, QWEN, Starcoder), and quantize LLMs with bits and bytes optimizations. Capstone projects include combining frontier and open source models for audio to text summarization, generating AI powered meeting minutes, and building a synthetic test data generator equipping you to deploy scalable, cost effective AI solutions using community driven tools.



## LLM Showdown: Evaluating Models for Code Generation & Business Tasks

Benchmark the leading LLMs across code generation and enterprise scenarios. You'll learn how to choose the right model using scaling laws (e.g., Chinchilla), understand limitations of existing benchmarks, and navigate open source leaderboards from HuggingFace. Dive into Python and C++ code generation challenges comparing GPT 4, Claude3.5, and open source variants while building custom Gradio UIs for live demos. You'll also explore human rated evaluations, business centric metrics, and advanced pitfalls like data leakage and overfitting, you'll master model centric versus business centric performance metrics and tackle advanced code generation challenges, ready to select and optimize the ideal LLM for any development task.



## Module 07



## Generative AI and Prompt Engineering

### 01 Generative AI (GenAI)

Dive into the core of generative AI by first exploring its high level architecture and foundational concepts. You'll learn how generative models are built, the key technologies that power them, and the inherent limitations and challenges—such as quality control and compute requirements. Finally, we'll break down the major components of a GenAI system—from data pipelines and model training to inference engines—and summarize how they fit together to generate text, images, and beyond.

### 02 OpenAI Models and Setup

Get up and running with OpenAI in minutes: create your account, secure your API key, and learn best practices for integrating APIs into real world applications. You'll then make your first API call, seeing how easy it is to send prompts and receive generated responses, laying the groundwork for every AI driven feature you'll build.

### 02 Prompt Engineering– Communicating with LLMs

Master the art of crafting effective prompts to guide LLM behavior. We'll begin with core prompt engineering principles and why they matter, then move through simple, few shot, zero shot, chain of thought, instructional, and role playing techniques—each supplemented with hands on examples. You'll also explore advanced strategies like temperature and top p sampling, learn to stream responses, and conclude with a concise summary of best practices and takeaways.

## **Ollama & Open-Source Models**

Explore Ollama's ecosystem and the broader world of open source LLMs. You'll start with Ollama's setup and system requirements, then dive into its CLI commands, model parameters, and REST API endpoints for generation and chat. Hands on labs will show you how to download and run Llama3.2, caption images with multimodal models, and interact via the Python SDK—culminating in creating custom models, streaming outputs, and leveraging Ollama's advanced "show" function for rich, interactive applications.

## **Context & Memory Management for LLMs**

Ensure your chatbots remember and adapt by focusing on context and memory management. You'll begin with an overview of why memory matters in conversational AI, then add persistent context to your chat interfaces through hands on exercises. Finally, we'll summarize techniques for balancing long term memory, context windows, and performance requirements.

## **Logging in LLM Applications**

Build reliable, maintainable AI systems by integrating robust logging. This module covers logging fundamentals and the lifecycle of log data in LLM applications. You'll implement a fully instrumented chatbot—capturing prompts, responses, and performance metrics—then conclude with best practices for log management, analysis, and compliance.

## Module 08



## LLM Application Tools

### 01 Getting Started with GPT Models

Dive into the world of GPT by unpacking its name and tracing ChatGPT's evolution. You'll learn how to connect to the OpenAI API, generate and customize text outputs, and implement keyword based summarization. Practical exercises guide you through coding a simple chatbot and enriching it with custom data. Finally, get introduced to LangChain in Python—setting the stage for building more advanced, chain powered applications.

### 02 HuggingFace Transformers

Explore the HuggingFace ecosystem by installing the transformers package and mastering its high level pipeline interface. You'll work with pre trained tokenizers, understand special tokens, and toggle between PyTorch and TensorFlow backends. The module wraps up with hands on practice saving and loading models, so you can seamlessly deploy and share your transformer based solutions

### 02 Question&Answer Models with BERT

Compare GPT and BERT architectures, then load BERT models and tokenizers to generate contextual embeddings. You'll calculate similarity scores between questions and passages and assemble a BERT based QA bot. Along the way, explore model variants like RoBERTa and DistilBERT to understand trade offs in performance and size.

### 02 Text Classification with XLNet

Advance from BERT to XLNet by examining their architectural differences and strengths. You'll preprocess text data, extract XLNet embeddings, and fine tune the model for classification tasks. Hands on evaluation shows you how to measure model accuracy and robustness, giving you confidence to deploy XLNet in real world scenarios.



## 06 LangChain Introduction

Get an overview of the LangChain framework and its business applications. Discover what makes LangChain powerful—its modular abstractions for chains, prompts, and memory—and see how the course will guide you through building production grade LLM applications step by step.

## 06 Tokens, Models, and Prices

Demystify the economics of LLM usage by understanding tokenization and how tokens map to model inputs and outputs. You'll compare pricing across different models, so you can budget your projects effectively and choose the most cost efficient configuration for your use case.

## 06 Environment Setup for LangChain

Set up a dedicated Anaconda environment tailored for Jupyter integration and LangChain development. You'll secure your OpenAI API key and configure it as an environment variable—establishing a reproducible, secure workspace for all subsequent modules.

## 06 The OpenAI API with LangChain

Take your first steps with the OpenAI API inside LangChain. Learn about system, user, and assistant roles in conversational prompts, build a sarcastic chatbot, and tune parameters like temperature, max tokens, and streaming—empowering you to craft nuanced, responsive interactions.

## 06 Model Inputs in LangChain

Delve into LangChain's core abstractions: work with ChatOpenAI, construct system and human messages, and generate AI messages. You'll build prompt templates with static and dynamic values, implement few shot prompting, and assemble LLM-Chain pipelines that chain prompts and models into coherent workflows.

## 06 Message History & Chatbot Memory

Ensure your chatbots remember context over time by exploring conversation buffer memories and summary memories. You'll implement buffer window strategies, configure memory chains, and combine multiple memory types—preserving continuity and relevance across multi turn dialogues.

## 06 Output Parsers

Transform raw LLM outputs into structured data by building output parsers. You'll implement string, comma separated list, and datetime parsers—enabling your chains to automatically extract and validate information for downstream use.

## 06 LangChain Expression Language (LCEL)

Master chaining logic with LCEL's intuitive syntax. You'll learn to pipe prompts, models, and parsers; batch and stream inputs; and leverage Runnable, RunnableSequence, and RunnableParallel classes. Advanced topics include the @chain decorator, passthrough utilities, lambda runnables, and real time graphing of chains.

## 06 Retrieval Augmented Generation (RAG)

Combine LLMs with external knowledge by implementing RAG pipelines. You'll load and split documents (PDF, DOCX, Markdown), embed text with OpenAI, and build Chroma vectorstores. Practice similarity search and Maximal Marginal Relevance (MMR), then generate responses that seamlessly integrate retrieved snippets—unlocking accurate, contextually grounded AI assistants.

## 06 Tools & Agents

Elevate your chatbots into autonomous agents by integrating tools and executors. You'll define custom tools (e.g., a Wikipedia fetcher), connect them to LangChain chains, and implement agent executors that dynamically select and call tools. By the end, you'll understand AgentAction and AgentFinish flows—creating reasoning chatbots capable of tool augmented problem solving.

## Module 09



### Vector Databases and Retrieval Augmented Generation (RAG)

#### 01 **RAG– Retrieval Augmented Generation**

Explore how RAG bridges the gap between pure generative models and real world knowledge retrieval. You'll start by defining RAG and its three core components—the retriever, the embedder, and the generator and compare RAG pipelines to stand-alone GenAI systems. A detailed diagram walkthrough will show you how data flows from document ingestion through vector search into the LLM, and you'll examine practical applications from up to date Q&A to domain specific assistants alongside challenges like latency, index freshness, and relevance tuning. We'll wrap up with key takeaways that solidify your understanding of when and why to choose a RAG architecture.

#### 02 **Vector Databases & Embeddings – Deep Dive**

Delve into the backbone of RAG workflows by mastering vector databases and embeddings. You'll learn why vector stores outperform traditional databases for similarity search and survey the top five platforms. After setting up your development environment (VSCode, Python, and API keys), you'll build a ChromaDB: ingest documents, generate embeddings, persist data, and query for nearest neighbors. Along the way, you'll compare similarity metrics—cosine, Euclidean (L2), and dot product—and explore vector DB internals, data structures, and performance metrics. A final summary consolidates best practices for integrating vector stores with LLMs.

## Hands-On RAG PDF Workflow

Put theory into practice by constructing a full RAG pipeline for PDFs. You'll begin with a high level architectural overview and diagram, then implement an embedding model class to vectorize document chunks. In step by step labs, you'll code the retrieval and generation workflow, showcase it in a live Streamlit UI, and conclude with a concise summary of pipeline design equipping you to build interactive RAG applications that serve up accurate, context aware responses from large document sets.

## Hands On Build a PDF RAG System with Text Chunking

Elevate your RAG expertise by designing a robust PDF ingestion system with chunking and overlap strategies. Starting from the architecture blueprint, you'll dive into deep dive logic for splitting PDFs into context preserving chunks, then develop a SimpleRAGSystem class encapsulating chunk processing, embedding lookups, and prompt assembly. After rigorous testing, you'll validate your PDF RAG system's performance and finish with a summary of chunking best practices—ensuring your applications deliver precise, coherent answers from long form documents.



## Module 10



### Large Language Model Fine-Tuning

#### 01 RAG- Retrieval-Augmented Generation

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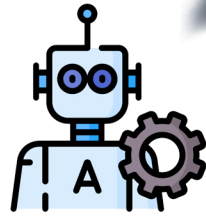
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## Module 11



### Autonomous AI Agents



#### Autonomous AI Agents

In this practical module, you'll learn how to create, build, and launch fully independent AI assistants. These agents can combine different powerful AI models (like GPT-4, Claude, Gemini, or DeepSeek), use helpful tools, and control real-world tasks automatically. You'll explore different ways to design them, compare popular tools for building agents (like OpenAI's tools, CrewAI, and AutoGen), and learn best practices for connecting them to outside data and services. The module covers everything from basic setup to advanced skills, including evaluating AI responses, creating web-based chat agents, handling unexpected questions, and finally deploying your finished AI assistants to platforms like Hugging Face Spaces and Gradio.

## Module 12



### End-to-End Agentic Projects

#### 01 Character AI Chatbot

Kick off with a character driven chatbot: install Anaconda, configure the OpenAI API, and execute your first text generation calls. You'll test token usage with the tokenizer tool, assign a distinct personality via system messages, and validate your chatbot's behavior culminating in a summary of lessons learned.

#### 01 AI Calorie Tracker

Advance to multimodal inputs by reading food images with Python's Pillow library and applying VisionGPT models for calorie estimation. You'll reinforce prompt engineering fundamentals, invoke OpenAI's vision endpoints in two parts, and expand the API payload to include nutritional data finishing with a consolidated wrap up.

#### 01 Adaptive AI Tutor with Gradio

Build an interactive, multilevel tutor using Gradio. Learn interface basics maps, images, streaming then create and test your AI tutoring function. You'll configure Gradio components, add real time streaming, and implement an explanation level slider for "Einstein," "Standard," and "Beginner" modes before summarizing outcomes.

#### 01 AI Powered Website Generation

Explore LLM benchmarking via Vellum leaderboards and ChatbotArena blind tests for Claude, Gemini, and GPT. You'll structure prompts for startup landing pages, generate HTML with OpenAI, Gemini, and Claude APIs, and compare output quality wrapping up with key insights on prompt design and model selection



## 06 Open Source QA with HuggingFace

Dive into the HuggingFace ecosystem: install libraries, set up Colab for GPU acceleration, and leverage transformer pipelines and tokenizers. You'll extract PDF content, build a QA pipeline around Phi4 Mini and Qwen, and switch models seamlessly via a Gradio interface concluding with best practices for open source LLM integrations.

## 06 Reasoning with Open Source LLMs

Load financial news datasets, test DeepSeek's reasoning and math capabilities, and apply a structured framework for selecting the right AI model. You'll compare model leaderboards and benchmark "Old vs. New" systems, prompt DeepSeek for classification tasks, and build a Gradio demo ending with a concise summary.

## 06 RAG Pipelines in LangChain

Construct a full retrieval augmented generation workflow: understand RAG principles, configure LangChain tools, and chunk your documents. You'll implement embeddings, vector stores, and RetrievalQA chains, then wrap everything in a Gradio UI culminating in a live RAG demo and key takeaways

## 06 Resume & Cover Letter AI Assistant with Pydantic

Use Pydantic for structured prompt outputs: define typed models, parse OpenAI responses, and merge job descriptions with resumes. You'll perform gap analysis, generate tailored CVs and cover letters, and validate the end to end workflow finishing with reflections on AI driven HR tools.

## 06 Fine Tuning LLMs with PEFT & TRL

Move from inference to fine tuning: load financial news data, format it for the SFTTrainer, and evaluate confusion matrix KPIs. You'll perform zero shot classification, launch PEFT based LoRA jobs, and plot training progress with Weights&Biases concluding with troubleshooting strategies and optimization best practices.

## 06 Multi Model Agent Teams with AutoGen

Explore AutoGen's agent orchestration: create and configure multiple agents (OpenAI GPT 4o, Claude), test conversation flows, adjust creativity settings, and implement proxy user agents. By day's end, you'll have a fully deployed agent team demo and a guided summary.

## **Agentic Workflows in LangGraph**

Leverage LangGraph's node edge architecture to build agentic workflows. You'll define custom tools, add sentiment nodes, perform flight and hotel searches via Amadeus, and integrate a Gradio interface wrapping up with a complete booking agent example and final insights.

## **Data Science Agent Crew with CrewAI**

Assemble a team of data science agents on CrewAI: import and inspect datasets, handle imputation and EDA, and train regression and random forest models. You'll then define multiple agents and tasks, automate the workflow, and refine agent responsibilities finishing with an overview of collaborative AI pipelines.

## **Agentic Workflows in n8n**

Implement AI powered workflows in n8n: build summarization and translation pipelines, integrate Google Sheets and email triggers, and manage variables and logs. This hands on day ensures you can extend n8n templates for robust, agent driven automation.

## **MCP & OpenAI Agents SDK**

Conclude by exploring the Model Context Protocol (MCP) with the OpenAI Agents SDK. You'll install and configure the MCP server, add custom tools, fetch manifest schemas, and create an AI agent that leverages MCP tools culminating in a comprehensive review and thank you wrap up.

# Testimonials



Muhammad Anas is one of my favorite instructors. His AI Engineering course was clear, practical, and engaging. He explains complex topics in a simple way and makes learning enjoyable. Highly recommended!

**Israr khan**



I recently completed the AI Engineering Specialist Course and it was an excellent experience. The content was well-structured and practical. Sir Anas is a great instructor who explains complex concepts clearly and always supports his students. His teaching made AI easy to understand and apply.

**Alvina Absar**



It was an exciting experience, learned a lot of new stuff. From basics to agentic AI this course is amazing.

**Toseef Naser Khan**



He is a wonderful teacher and the course is interesting.

**Masooma Zahra**



Teacher is highly capable and course material is well designed. However one crucial thing is really missing that there is less room for proper hands on especially the instructor led.

**Ali Ahmad**



About the Course:  
Well-structured. Needs better time management and inclusion of emerging tools like DeepSeek, MCP, A2A, etc.

About the Instructor:  
An inspiring and impressive personality, masha'Allah.

**Muhammad Wasiq Khan**



# Testimonials



The course was overall the best one of its kind. Thank you to Analytix Camp and my Instructors for providing me the best for my future. 🌟🌟🌟🌟🌟🌟🌟🌟

**Iman Faisal**



Attending Sir Shahzaib's Generative AI course was a great experience. It covered everything from AI basics to advanced topics with hands-on projects. His clear teaching and constant support helped us build real-world AI models confidently.

**Makshoof Kamal Jilani**



Instructor was very nice, honest and legitimate person

**Shahryar khan**



The course and instructor were both good but what I felt was there was somewhat a bit lack of delivering the content. It was a first AI course for me, so I faced a bit of problem in apprehending the concepts, as the theoretical base and concept build up was somewhat weak in the course.

**Muhammad Shoaib Omer**



About the Course:  
Well-structured, but needs better time management and inclusion of emerging tools like DeepSeek and Agent SDKs.

About the Instructor:  
Truly inspiring personality, masha'Allah.

**Muhammad Wasiq Khan**



It had been an amazing experience so far, no doubt this course demands a lot of extra hours of study, but I'm really happy for this course content and the trainer.

**Toseef Naser Khan**





# WHY CHOOSE US

**ATS  
RESUME**

**FREE  
PORTFOLIO  
WEBSITE**

**VIRTUAL  
INTERNSHIP**

**ONLINE  
CREDIBILITY**



# FREE PORTFOLIO WEBSITE

## Showcase Your Work with a Stunning Portfolio Website!

A Project Portfolio Website is your digital resume powerful tool that helps you stand out and proves your expertise. Whether you're a **Fresh Graduate** or transitioning from a **Non-Technical Background**, a well-crafted portfolio significantly increases your chances of landing an interview by providing tangible proof of your skills.

We've always encouraged our learners to build a portfolio, but we noticed that many struggled to create one from scratch due to the lack of user-friendly tools. That's why we've introduced an **Automated Portfolio Website** feature within our bootcamp! Now, instead of spending hours figuring out web development, our learners can focus on **Practicing, refining their Projects, and Preparing for Interviews.**

To make it even better, we offer **Multiple Professional Themes**, allowing you to choose the design that best represents your personal brand and showcases your

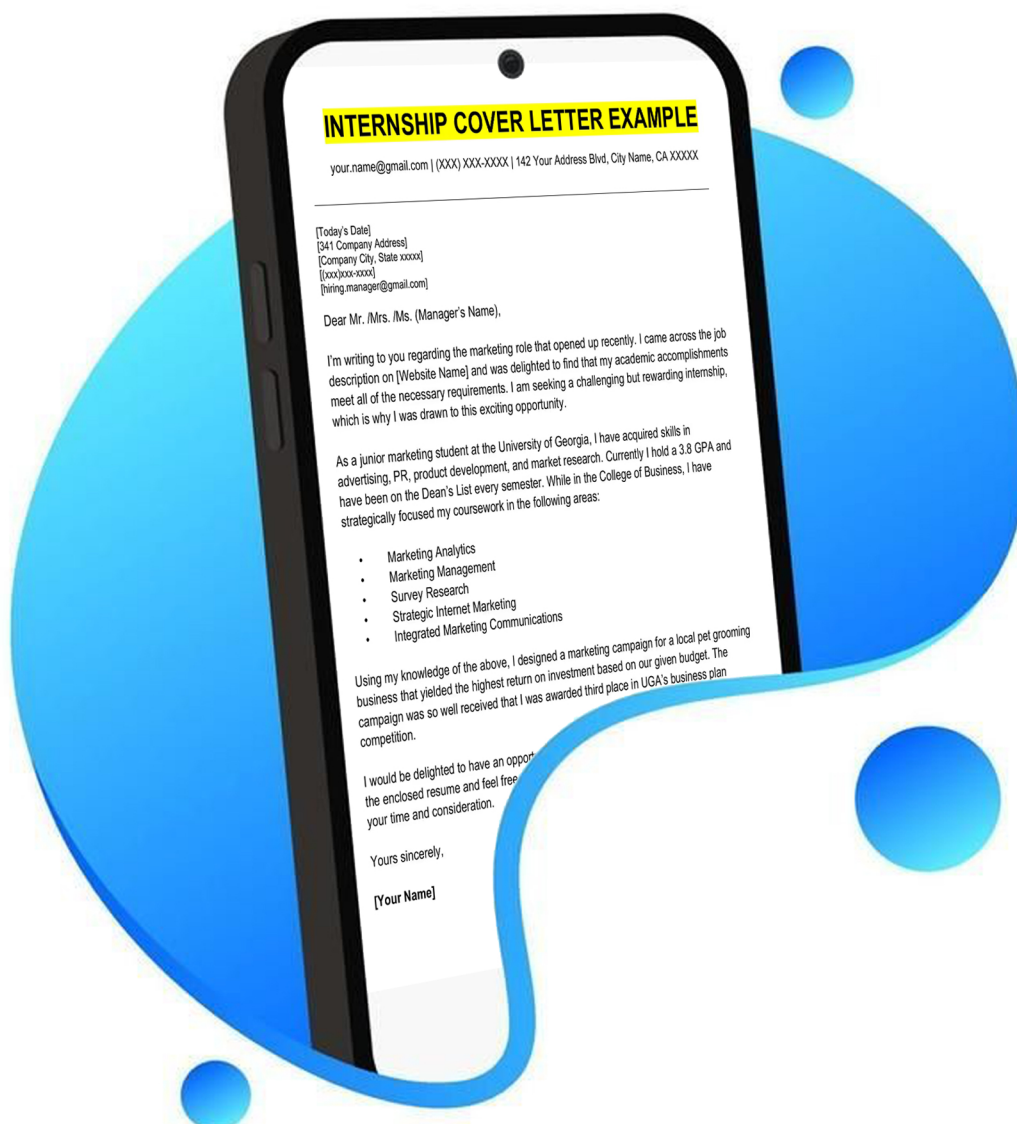
Work effectively. **Let your portfolio speak for you effortlessly!**



# VIRTUAL INTERNSHIP

Our Virtual Internship in AI Engineering is designed to give you **hands-on experience** in building intelligent systems and deploying AI solutions. You'll work on **real-world projects**, learn how to translate business and technical requirements into scalable AI architectures, and develop advanced models and pipelines to solve complex challenges.

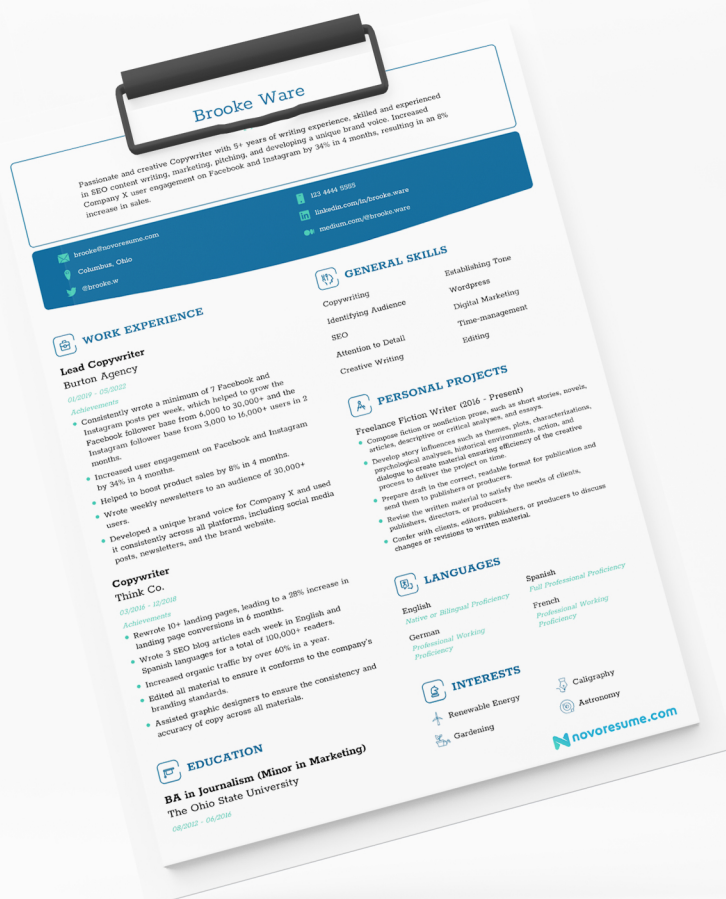
With a strong focus on practical learning, system design, and critical thinking, this internship will help you build the skills and confidence needed to engineer real-world AI solutions and drive **meaningful impact** in any organization.



# ATS RESUME

We provide you with a professionally designed, **ATS-friendly resume** that's tailored to meet the demands of today's digital hiring systems. This means your resume won't get filtered out by automated software, and instead, lands right in front of hiring managers.

**With the right keywords, formatting, and structure,** it gives you a real edge in landing interviews and standing out in a crowded job market. Our resumes are crafted to highlight your strengths and achievements in a way that resonates with both machines and humans. Whether you're changing careers, re-entering the workforce, or aiming for your next big opportunity, we help ensure



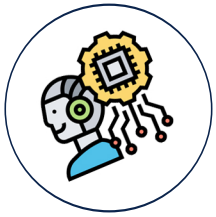


# ONLINE CREDIBILITY

This module is all about using the internet to boost your chances of finding a job, accessing **Better Career Opportunities**, and exploring freelancing options. It will also guide you through building a **Strong Personal Brand** that delivers long-term benefits in today's digital-first job market.

You'll learn how to present yourself professionally online, expand your network, and position yourself as a credible candidate or service provider. By the end of this module, you will have an updated LinkedIn profile picture, banner image, and About section. Additionally, you will receive **Clear, Actionable Steps** to continue enhancing your online presence and **Attract the Right Opportunities**.





# Why Becoming a **AI Engineer** is a Strong **Career Move**



In today's **AI-driven world**, organizations across every industry—from tech and finance to healthcare and retail—are leveraging artificial intelligence to automate processes and drive smarter decisions. An **AI Engineer** plays a central role in designing, building, and deploying AI solutions that transform raw data into intelligent systems.

Enrolling in an **AI Engineering** course not only prepares you for one of the most in-demand tech roles but also equips you with the tools and skills to build a high-impact, future-proof career in artificial intelligence.



# High **Salary** Potential

With experience and ongoing upskilling, such as mastering Python, SQL, cloud platforms, Machine Learning, and Deep Learning, many professionals advance into roles like Senior **AI Engineer or AI Solutions Architect**, which offer even higher compensation and the opportunity to **lead AI-driven** innovation across industries.



# Top Companies that are Looking for AI Engineer

Top companies are hiring AI Engineers to build intelligent systems that transform data into automated solutions and smarter decision-making. As AI drives efficiency, enhances customer experiences, and sharpens competitiveness, the demand for skilled AI engineers is rapidly growing across industries.

The logo for afiniti, featuring the word "afiniti" in a bold, black, sans-serif font with a registered trademark symbol.The logo for systems, featuring the word "systems" in a grey, sans-serif font with a small orange dot above the 'y'.The logo for JazzCash, featuring a stylized yellow and red 'J' icon above the text "JazzCash" in a bold, black, sans-serif font.The logo for telenor, featuring a blue stylized 't' icon followed by the word "telenor" in a black, sans-serif font.The logo for 10Pearls, featuring a black circle with a white '10' inside, followed by the word "Pearls" in a bold, black, sans-serif font.The logo for S&P Global, featuring a horizontal line above the text "S&P Global" in a bold, red, sans-serif font.The logo for CONFIZ, featuring a green square with a white circular icon containing a stylized 'G', with the word "CONFIZ" in a black, sans-serif font below it.The logo for folio3, featuring the word "folio3" in a bold, red, sans-serif font with a small yellow and blue dot above the '3'.The logo for NETSOL, featuring a blue stylized 'N' icon above the word "NETSOL" in a bold, black, sans-serif font.The logo for CureMD, featuring the text "CureMD" in a blue, sans-serif font with a trademark symbol.The logo for ibex., featuring the word "ibex." in a bold, red, sans-serif font.The logo for teradata., featuring the word "teradata." in a bold, black, sans-serif font.



# Freelancing as a AI Engineer

As an **AI Engineer**, you can work on major freelance platforms like Upwork, Fiverr, and Toptal, where businesses actively seek experts for AI-driven projects. Platforms like Freelancer and PeoplePerHour also offer diverse opportunities to apply your skills in Python, machine learning, deep learning, AI model deployment, and cloud solutions. For those interested in **remote, full-time roles**, these platforms regularly list long-term opportunities in AI engineering.

## GameFi Developer Needed for AI-Powered Gambling Game on Solana

Hourly - Posted 19 days ago

Less than 30 hrs/week

Hours needed

Expert

Experience level

Just ideated a meme-driven, AI-powered prediction survival game — and looking for someone who's down to help bring it to life on Solana...

Artificial Intelligence

Blockchain Development

Artificial Intelligence Jobs

Rust

See more

## AI Specialist Needed for Innovative Project

Hourly - Posted 18 days ago

Less than 30 hrs/week

Hours needed

Intermediate

Experience level

We are seeking an experienced AI specialist to develop and implement cutting-edge artificial intelligence solutions for our project. Th...

Artificial Intelligence

TensorFlow

Python

Adobe Illustrator

See more

## Python 3D Engineer for Human Body Modeling & Virtual Try-On

Fixed-price - Posted 15 days ago

\$2,000

Fixed-price

Intermediate

Experience level

We're building an AI-driven system that estimates body shape from measurements and visualizes clothing fit on personalized 3D avatars...

Artificial Intelligence

Artificial Intelligence Jobs

PyTorch

3D Modeling

Python

See more

## Expert Voice Cloning & Speech AI Engineer (Open-Source Voice Mode...

Fixed-price - Posted 1 month ago

\$500

Fixed-price

Expert

Experience level

We are seeking an experienced AI Engineer with deep expertise in voice cloning, speech synthesis, and open-source voice model developme...

Artificial Intelligence

Artificial Intelligence Jobs

See more



# Most In-Demand for the Next 10 years

Every leading learning platform relies on Data Scientists to analyze user behavior, develop advanced course recommendation models, and enhance learning outcomes. By leveraging machine learning techniques and analyzing engagement and performance data, data scientists help these platforms optimize content strategies and improve overall user satisfaction.

- Software Engineering
- Computer Science
- Information Systems

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1. Big Data Specialists
2. FinTech Engineers
3. AI and Machine Learning Specialists
4. Software and Applications Developers
5. Security Management Specialists
6. Data Warehousing Specialists
7. Autonomous and Electric Vehicle Specialists
8. UI and UX Designers
9. Light Truck or Delivery Services Drivers
10. Internet of Things (IoT) Specialists
11. Data Analysts and Scientists
12. Environmental Engineers
13. Information Security Analysts
14. DevOps Engineers

## 3. AI and Machine Learning Specialists

AI (Artificial Intelligence) and Machine Learning Specialists are shaping the future by creating intelligent systems that can learn, adapt, and make decisions with minimal human intervention. Their work powers technologies like virtual assistants, recommendation algorithms (like those on Netflix and Spotify), self-driving cars, and even advanced healthcare diagnostics.

These specialists design algorithms that allow machines to analyze data, recognize patterns, and improve over time. They work across various industries, including tech, healthcare, finance, and robotics, making processes smarter and more efficient. As AI continues to evolve, the demand for professionals who can develop and manage these systems is rapidly growing.

**What Do They Do Daily?**

- Develop machine learning models and AI algorithms
- Train systems to recognize patterns and make predictions
- Analyze large data sets to improve AI performance

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## 1. Artificial Intelligence (AI) and machine learning engineers

**Demand:** AI and machine learning continue to transform industries, creating [growing demand for engineers](#) who can develop intelligent algorithms and models. These professionals are key drivers of innovation in automation, predictive analytics, and more.

**Job Satisfaction:** This role allows engineers to work on cutting-edge projects with the potential to shape the future, making it highly rewarding.

**Salary:** Starting salaries are around £45,000 per annum, with experienced professionals earning [up to £120,000](#). In London, the median advertised salary for an AI Engineer is [£87,500](#), which is 17% above the UK average.

Despite being a highly-skilled, technical career, the job pathway may be more accessible than you think. If you're looking to enter the AI space, the [LSE Data Analytics Career Accelerator](#) has a dedicated AI and Data Analytics Learning Track, offering live, expert-led Masterclasses with the latest GenAI insights and practical skills. Designed to adapt as technology evolves, this

**Related programmes**

6 months

**Data Analytics**

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Topics Colleges Units Blog Media Contacts Search News

**How UC helps:** The [School of Information Technology](#) offers cutting-edge coursework, and co-ops help students land jobs before graduation.

## Artificial intelligence & machine-learning engineers

**Growth rate:** 34% by 2031  
**Median salary:** \$120,000/year

AI is revolutionizing industries, from self-driving cars to chatbots and automation. As a student at the [College of Engineering and Applied Science](#), you'll gain hands-on, AI-driven experiences and [co-op opportunities](#) at companies like Google and Honda.

**How UC helps:** UC Blue Ash's [Artificial Intelligence Program](#) equips students with hands-on projects and AI-driven internships.

## Sustainability & renewable energy experts

**Growth rate:** 45%+ (BLS)  
**Median salary:** \$80,000/year

# OUR FACULTIES



THE CITIZENS FOUNDATION



**SYED  
IKRAM ALI**

Data Analyst (12+ Years)  
Snr, Manager Data  
Analytics and Insights, the  
Citizen Foundation (TCF)



Bank Alfalah



**SHAHZEB  
MALIK**

Data Scientist  
(05+ Years)  
Manager Data Science -  
AVP - Bank Alfalah Limited



**HASNAIN  
ALI**

AI Engineer (4+ Years)  
AI Team Lead  
@ ICSArabia



**SAIF  
ALI**

Finance Specialist  
(05+ Years)  
Senior Consultant @ EY



**UZAIR  
RASHEED**

Data Analyst (07+ Years)  
Technical Delivery Manager  
- Data Analytics - DM  
Clinical Research (USA)



# ALUMNI DIARY



**Aimal Khan**  
Q.A University  
Research Assiss





**Muzammil Hussain**  
CEO Geo News  
Business Management Analyst





**Azhar Ali**  
Transition Holding  
Supply Chain Management





**Umair Abbasi**  
TCL Industries  
Warehouse/Ex-Coordinator





**Maham Nadeem**  
Pak-Turk Maarif  
Admin Officer.





**Muhammad Babar**  
Saudia Cargo  
Senior Operation Executive





**Faizan Rervaiz**  
Babria Town  
Customer Service Representative





**Amber Farooq**  
Habib Metro  
BI & Dashboard Officer

