### Pi Bi Tech - Al Product Developer & Industry Internship Certification Program

Pi Bi Tech - Al Product Developer & Industry Internship Certification Program - A launchpad for innovation and career success.

Duration: 60 Hours, (Weekdays + Weekend Batches Available)

Outcome Build your own AI product from scratch, own the IP, pitch to VCs, and take it to : market. Job-Ready AI Product Developer eligible for top product companies globally.

All-in-One Certification : No specialization tracks - learners gain complete Al product knowledge from concept to deployment to growth strategy.

#### Course Learning Objectives

### By the End of This 45-Day Program, You'll:

- Launch your own Al-powered product (hosted by Pi Bi Tech)
- V Pitch for VC funding and business mentorship
- Become a certified AI Product Developer ready for high-paying roles
- V Have a GitHub-backed portfolio with real-world experience
- Receive an Internship + Experience Certificate for top product roles

#### Course Modules

# Module 1: AI Product Design & Prototyping (6 Hours)

- · Design Thinking for AI Products
- · Wireframes, Personas & User Journeys
- · Rapid Prototyping using Al tools

Tools: Figma, Miro, Whimsical, Voiceflow, Balsamiq

## Module 2: Programming Fundamentals & Backend Setup (5 Hours)

- · Python, JavaScript, Go Crash Introduction
- RESTful APIs & FastAPI/Flask Basics
- · Working with JSON, APIs & Integrating LLMs

Tools: Python, Postman, Swagger, FastAPI

### Module 3: Full-Stack Application Development (6 Hours)

- · Frontend: ReactJS + Tailwind for AI UI
- · Backend: Flask/FastAPI with DB
- · Connecting AI APIs to UI

Tools: React, FastAPI, MongoDB, PostgreSQL

#### Module 4: Databases for AI (4 Hours)

- RDBMS vs NoSQL
- Graph Databases for knowledge representation
- Vector Databases for embedding search

Tools: PostgreSQL, MongoDB, Neo4j, Pinecone, Weaviate

# Module 5: Data Engineering & Pipeline Building (5 Hours)

- ETL/ELT Concepts
- · Data Cleaning & Transformation
- · Batch vs Streaming Pipelines

Tools: Apache Airflow, Pandas, Spark, dbt

#### Module 6: AI & Machine Learning Essentials (6 Hours)

- · ML Lifecycle & Supervised Learning
- · Feature Engineering & Model Evaluation
- · Model Deployment Basics

Tools: Scikit-learn, TensorFlow, MLflow

#### Module 7: Generative AI & LLMs (6 Hours)

- Introduction to LLMs: GPT-4, Claude, Mistral, Llama3
- · Prompt Engineering Best Practices
- · LangChain, LlamaIndex, LangGraph for LLM apps

Tools: OpenAI, LangChain, Hugging Face, LlamaIndex, LangGraph

## Module 8: Retrieval-Augmented Generation (RAG) (4 Hours)

- RAG Architecture for Enterprise AI
- Chunking, Embeddings & Retrieval Pipelines
- Indexing with Vector DBs

Tools: Pinecone, Weaviate, FAISS, LangChain

#### Module 9: AI Agents & Agentic Workflows (5 Hours)

- Understanding Al Agents: Planning, Memory, Execution
- Building Multi-agent systems for tasks
- Use Cases: AutoGPT, CrewAI, LangGraph

Tools: CrewAI, AutoGPT, LangGraph

### Module 10: Cloud & DevOps for AI (4 Hours)

- · Cloud Deployment (AWS, GCP)
- CI/CD Pipelines
- Dockerization, Microservices, API Gateway

Tools: Docker, GitLab CI/CD, AWS Lambda, ECS, API Gateway

#### Module 11: AI Product Strategy & Business (5 Hours)

- · Building a Business Model for AI Products
- · Ethical AI, Governance, and Compliance
- · Monetization Models for Al Tools

Tools: Notion, Lean Canvas, Tableau, Google Sheets

## Module 12: Go-To-Market & Product-Led Growth (4 Hours)

- Positioning & Messaging Al Products
- · Product-Led Growth (PLG) Frameworks
- Building Launch Strategy & Feedback Loops

Tools: HubSpot, Mixpanel, Amplitude, SEMrush

#### Capstone Project (Integrated Throughout Course)

Objective : Build a complete AI product prototype → MVP → deploy → prepare GTM.

#### What Makes This Program Unique?

#### Build Your Own Product from Scratch

From idea to prototype to full-stack AI app - develop your own AI-powered product by the end of the training.

#### You Own Your Product IP

Unlike traditional bootcamps, you retain full ownership of the product you build.

#### VC Funding Support from Pi Bi Tech

We help high-potential learners pitch to VCs and investors, with mentorship and pitch deck assistance to bring your product to market.

#### Product Hosting & Launch Support

Pi Bi Tech provides cloud hosting and go-to-market support so your product can go live and scale.

### Expert Internship Experience Certificate

Get an Industry-Recognized Internship Certificate from Pi Bi Tech, signed by top mentors and practitioners.

#### Placement Support

We help you land top AI product roles in leading product companies - with resume reviews, mock interviews, and referrals .