

تبارك الأكاديمية السعودية الرقمية لـ

فاطمة طلال عبد السلام مرغلاني

Fatmah Talal Abdulsalam Merghlani

On successfully completing **Data Science Bootcamp** in a journey
that lasted 12 weeks From 18 August 2024 to 7 November

Issue date 7 November 2024

إتمام معسكر همّة لعلم البيانات بنجاح
بعد رحلة استمرت لمدة 12 أسبوع
في الفترة من 14 صفر 1446 إلى 5 جمادى الأول 1446

تم إصدارها بتاريخ 5 جمادى الأول 1446

WISHING YOU A CONTINUOUS SUCCESS

مع تمنياتنا بدوام التوفيق و النجاح

الرئيس التنفيذي
للأكاديمية السعودية الرقمية

عبدالله بن سعد الغامدي

Bootcamp Plan

WEEK 01

Pre-bootcamp Python Introduction

- The fundamentals of Python, including essentials like lists and dictionaries
- Grasping the basics of OOP for effective code organization
- Building a solid foundation in Python to tackle a variety of programming challenges

WEEK 02

Python & SQL

- Setup
- Python for Data Science
- Data sourcing
- SQL Basics
- SQL Advanced

WEEK 03

Statistics

- Data Analysis
- Data Sourcing in Pandas
- Data Visualization
- Algebra & Calculus
- Statistics & Probabilities

WEEK 04

Decision Science & Preprocessing

- Project Setup
- Statistical inference
- Linear regression
- Logistic regression

WEEK 05

Supervised Learning Generalization and Overfitting & Performance Metrics

- Fundamentals of Machine learning
- Prepare the dataset
- Performance metrics
- Under the hood
- Model Tuning

WEEK 06

Unsupervised Learning

- Workflow
- Ensemble Methods
- Unsupervised Learning

WEEK 07

Deep Learning

- Time Series
- Deep Learning Basics
- Optimizer Loss & Fitting
- Convolutional Neural Networks

WEEK 08

Deep Learning

- RNN & NLP
- Transformers
- Train at scale
- Cloud training
- Automate model lifecycle

WEEK 09

MLOps & Generative AI

- Predict in production
- User interface
- Generative AI for coding
- AI ethics
- Explainable AI
- CI/CD

WEEK 10

Final project

- Pitch session
- Full-time mentoring from expert teachers

WEEK 11

Competency Development & Career Coaching

- Self-Awareness
- Business Writing Skills
- Presentation and Communication Skills
- Active Leadership for IT professional
- Resume & LinkedIn Skills
- Interview Skills

WEEK 12

Competency Development & Career Coaching

- Self-Awareness
- Business Writing Skills
- Presentation Skills
- Active Leadership for IT professional
- Resume & LinkedIn Skills
- Interview Skills
- Communication skills

