SKILL WHR

COMING SOON...

DATA SCIENCE WITH PYTHON BOOTCAMP

DURATION:
EIGHT(8) WEEKS

FOR MORE ENQUIRIES & REGISTRATION
0242505356
0554217136
0543003458

TRAINING MODE:
FACE - TO - FACE

DATA SCIENCE AND MACHINE LEARNING WITH PYTHON:

MAKING DATA-DRIVEN DECISIONS

Become a data-driven decision maker with the 8-week data science training delivered by Start Smart.

ABOUT

Start Smart

Welcome to Start Smart Data Science Bootcamp at the University of Cape Coast, Ghana! We are a passionate team of professionals dedicated to empowering university students with the skills and knowledge needed to excel in the field of data science. Our comprehensive training programs bridge the gap between theory and practice, providing students with practical expertise in data analysis, machine learning, statistical modeling, and data visualization. With interactive lectures, hands-on projects, and experienced instructors, we foster a collaborative learning environment where students can tackle real-world data challenges and develop their data science skills.

At Start Smart, we believe in the transformative power of data science and its impact on various industries. Our goal is to create a vibrant learning community that equips students with the tools and confidence to drive positive change through data-driven insights. Whether you are a beginner or an advanced learner, our curriculum caters to students of all levels. Join us on an exciting journey of discovery, innovation, and professional growth, as we unlock the immense potential of data science together at the University of Cape Coast.

MISSION

Our mission is to empower individuals and organizations with the knowledge and skills to leverage data for informed decision-making and drive innovation in the digital age.

VISION

Our vision is to transform education by integrating data science across disciplines, equipping students with essential data literacy skills and empowering them to become informed, responsible decision-makers in an increasingly data-rich world.

ABOUT

THE PROGRAM

Our training program focuses on utilizing the power of the Python programming language, a versatile tool widely used in the data science community. Python offers a rich ecosystem of libraries and frameworks specifically designed for data analysis, machine learning, and data visualization. Through hands-on exercises and projects, students will gain proficiency in Python and learn how to leverage its extensive capabilities for data manipulation, statistical analysis, predictive modeling, machine learning and web scraping.

By the end of our training program, students will have acquired a solid foundation in data science, utilizing the Python programming language as a primary tool. Join us at Start Smart Data Science Training and embark on a transformative learning journey that will prepare you for the exciting challenges and opportunities in the field of data science. Let's unlock the power of data, utilizing Python, and make a meaningful impact in the world.

PROGRAM

BENEFITS

- Gain comprehensive knowledge and practical skills in data science, empowering you to tackle real-world data challenges.
- Learn to utilize the versatile Python programming language, widely used in the data science community.
- Develop proficiency in data manipulation, statistical analysis, and machine learning modeling using Python libraries and frameworks.
- Engage in hands-on projects and exercises to apply your learning and gain practical experience.
- Foster collaboration and teamwork skills through interactive learning environments.
- Enhance your analytical thinking and problem-solving abilities in a data-driven context.
- Prepare yourself for a rewarding career in data science or enhance your analytical skills for various professional fields.

PROGRAM

CURRICULUM

The program is 8 weeks long:

WEEK 1 - 3

Foundational Courses: Python Crash Course

Topics

- ★ Variables
- ★ Data types: strings, integers, floats, boolean etc.
- ★ Collection data types: list [], tuples (), sets {}, dictionary {'k': 'v'}
- ★ Conditional Statements: logical operators (and, or and not), if, elif, and else.
- ★ Loops: for and while loops
- ★ Functions: the "def" keyword
- ★ Object Oriented Programming (Classes, inheritance, abstraction, polymorphism etc.)
- ★ Working with external files
- ★ Exceptions Handling (try, except, finally)

WEEK 4 - 5

NumPy

- NumPy Introduction
- NumPy Arrays
- Array Indexing and Slicing
- Array Manipulation
- Array Operations and Functions
- Array Filtering and Boolean Operations
- Linear Algebra Operations
- Random Number Generation

Pandas

- Pandas Introduction
- Series and DataFrame
- Data Loading and Saving
- Data Manipulation and Cleaning
- Descriptive Statistics and Aggregation
- Time Series Analysis
- Handling Outliers and Data Quality Issues
- Data Merging and Joining

WEEK 6

Data Visualization

Matplotlib and Seaborn


Line Chart


Scatter Plots


Bar Plots


Box Plots


Histograms


Heatmaps


Pair Plots


Distribution Plots

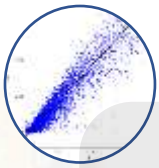
Week 7 - 8

Machine Learning with Scikit Learn

DATA PREPROCESSING

Techniques

- Data Scaling
- Label Encoding
- Data cleaning
- Outlier removal
- One Hot Encoding
- Principal Component Analysis



SUPERVISED ML

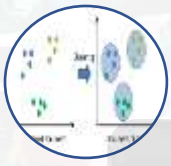
Regression

- Multiple Linear Regression
- Lasso Regression
- Ridge Regression
- Decision Tress Regressor
- SVM
- Random Forest Regressors

SUPERVISED ML

Classification

- Logistics Regression
- SVM
- Decision Tree classifier
- Random Forest classifier
- Gradient Boosting
- Naïve Bayes
- XGBoost classifier
- AdaBoost



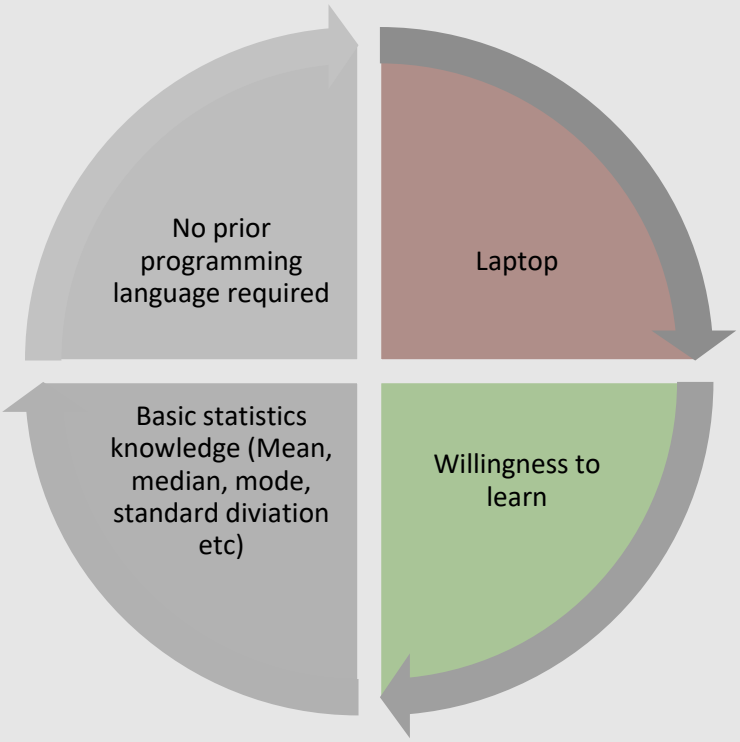
UNSUPERVISED ML

Algorithms

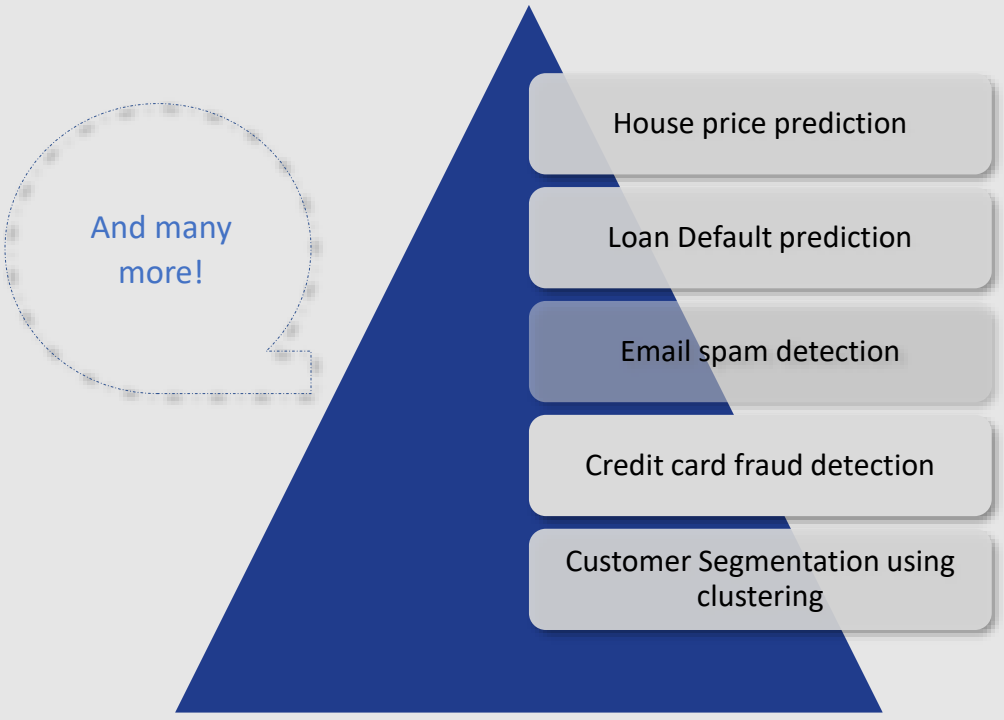
- KMeans Clustering
- Hierarchical Clustering

PROGRAM

Prerequisites



HANDS ON PROJECTS



OUR TEAM

SALIFU ZAKARI
Data Scientist & Database Admin.

BRIGHT ABANKWAA
Programmer & Creative Designer

SAMUEL AWUAKYE
Public Speaker & Top Promoter

Start Smart

READY TO BECOME A DATA ANALYST, DATA SCIENTIST OR A MACHINE LEARNING ENGINER?

APPLY NOW

SPEAK TO US

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HAVE QUESTIONS ABOUT THE PROGRAM OR HOW IT FITS IN WITH YOUR CAREER GOALS?

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