Forsk Summer Developer Program 2019 – Day wise Breakup

WEEK 1

Day 1	Day 2	Day 3	Day 4	Day 5
Python Toolset Installations	List	Enumerate	File handling	Creating a class
Python in Industry	Membership Function (in)	Dictionary	Exception Handling	Generators
Where we can use Python	for each loop	Set	with open	Regular Expressions
History of Python	Functions		seek tell	GIT Part 1
Features of Python	Tuple		OS Related File Handling Command	
Library Import			PIL Library	
String Handling			Playing with csv file	
Control Flow and Loops				

WEEK 2

Day 1	Day 2	Day 3	Day 4	Day 5
Any and All	Data Exchange Mechanisms	Data Scrapping using BeautifulSoup and Selenium	Database Handling in Python	Knowledge Review
Collections (OrderedDict, NamedTuple, DefaultDict, Counter)	JSON Parsing		Relational (MySQL)	Industry Session
List Comprehension	GET, POST , REST API		NoSQL Databases(MongoDB)	GIT Part 2
Lambda	Talking to Internet			
Filter				
Map				
Reduce				
Zip				

WEEK 3

Day 1	Day 2	Day 3	Day 4	Day 5
Matplotlib Part 1	Pandas	Statistics Part 1	Power BI	Knowledge Review
NumPy	Matplotlib Part 2	ML Terminology	Databricks	Industry Session
		ML Use Cases		Code Reviews
		ML Tools and Technologies		Project Work

WEEK 4

Day 1	Day 2	Day 3	Day 4	Day 5
Regression Algorithms — Linear, Multiple and Polynomial Regression	Classification Algorithms — Logistic Regression, kNN,Confusion Matrix	Regression Algorithms — DecisionTree and RandomForest	Overfitting Handling — Ridge, Lasso, and ElasticNet Regression	Model Performance Metric for Regression and Classification

WEEK 5

Day 1	Day 2	Day 3	Day 4	Day 5
Classification Algorithms — Kernel SVM and Naive Bayes	Clustering — kMeans++, DBSCAN	Association — Apriori	Dimensionality Reduction — PCA and LDA	Introduciton to ANN and CNN (Deep Learning)
			k-Fold Cross-Validation	Knowledge Review
				Industry Session

WEEK 6

Day 1	Day 2	Day 3	Day 4	Day 5
Natural Language Processing (NLP)	Using OpenCV for Face Detection	Mathematical Building Blocks of Neural Networks (ANN)	CNN	Industry Session
				Knowledge Review

WEEK 7

Day 1	Day 2	Day 3	Day 4	Day 5
RNN — LSTM and GRU, Deep Learning for Time Series Analysis	Unsupervised DL: AutoEncoders	Knowledge Review	Projects allocation and Discussion	
	Unsupervised DL: Self Organizing Maps	Code Review		
		Industry Sessions		

WEEK 8

Project Reviews
Demos and Discussion
Mock Interview
Project Ends