

SOFTZINO
TECHNOLOGIES
PRESENTS

CAREER IN IT

সম্ভাবনা ও বাস্তবতা

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Speaker



Transitioning into a career in Artificial Intelligence and Machine Learning

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AN EVENT BY



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What is Happening Around

- Computer Vision
 - Object Detection, Pattern/Behavior Classification, Activity Detection, Face Recognition, OCR, Visual Segmentation, Driverless Cars
- Acoustic Modeling
 - STT, TTS, Noise Canceling, Voice Biometric, Speaker Detection, Incident Detection, Voice Generation
- Recommenders
 - Product recommendation, Job/Candidate Matching, Personalized Diet/Exercise/Education plan, Stock/Investment Recommendation
- NLP
 - Chatbots, QA, Social Media Analysis, Customer Satisfaction Analysis, Trend Analysis



Fresh Starters

- Challenge the Fear
- Build a Strong Foundation
- Start Playing Around – (Don't Only Watch videos, Build your First Model)
- Connect to the right community – Go Networking
- Develop a habit of Slow Reading
- Continuous Learning



What Are the Options

- Data Engineer – All about managing high influx of Data
- ML Engineer – Understand the data and see where it takes you
- DL Engineer - Master the behaviour of Big Data Black Boxes
- Data Analyst – Grow Like Neo
- MLOps - Design and Deploy Large Models with high compute and frequency
- Data Manager – Beyond Library Science
- ML Engineering Manager – Re-Learn to manage New breed of Engineers
- Data Modeler/Annotators – The Super Hero



Step / Step

- Start With Python
- Understand Exploratory Data Analysis and Visualization – Pandas, numPy, matplotlib
- Step into Feature Engineering – The Rise of a Data Scientist
- Select the Features for Modeling
- Train Your Models
- Tune Your Hyperparameters
- Deploy your Model

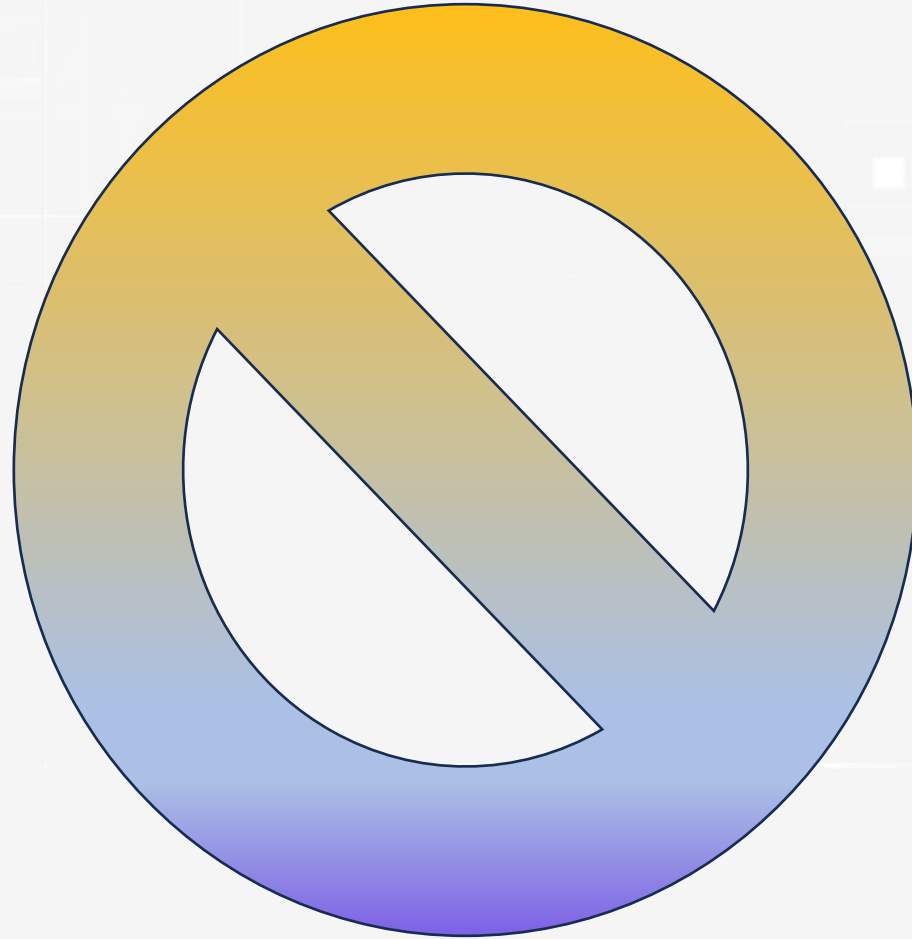


ToolBox

- Statistical Modeling
 - Numpy, Pandas, Matplotlib, scikit-learn
- Signal Processing
 - OpenCV, Pillow, OpenSMILE, PyAudio, scikit-learn, XgBoost
- Visualization
 - Matplotlib, Seaborn, TensorBoard, Plotly, D3.js
- Deep Learning
 - Keras, TensorFlow, Pytorch
- Deployment
 - TF/Pytorch Serving, Docker, Kubernetes, Amazon Sagemaker, Azure ML, GC AI Platform, Flask/Fast API, Apache Kafka, Nvidia Triton, Intel OpenVINO





Learning Path



Do I need to tell you !!!!

Transitional Paths



Non - Programmers	➡	Annotator, Data Manager, BI Developer
Fresh Coders	➡	Data Engineers, Junior ML Engineers, Deployment and Support Engineerd
Mid-Devs(W/M)	➡	ML Engineers, Cloud ML Integrators, Deployment Engineers
Managers	➡	ML Engineering Managers, Data Product Managers, BI Managers, Data Analyst
Top Level Executives	➡	Business Developemnt, Product Developemnt, ML Architect

Top Targets

- Machine Learning Engineer
- Data Scientist
- BI Developer
- Research Scientist
- Bigdata / ML Architect



Business Opportunities

- Chatbots are rising
- Lots of data needs to be managed and prepared for learning
- Small Devices will be needing Eyes, Ears and Brains – so with the websites
- Lack of people who can READ (Papers 😊)
- Lack of real Problem Solvers aka. Engineers
- High Availability of passive data - If you can grab it

