

Real Time Group^{LTD}

Real Time & Embedded Linux Solutions

Machine Learning with Python

Duration: 60 Hours
Hands-On-Training: 55%

רח' יגאל אלון 123 ת"א טל. 077-7067057 / 050-3309318 פקס 077-5067058

www.rt-hr.co.il

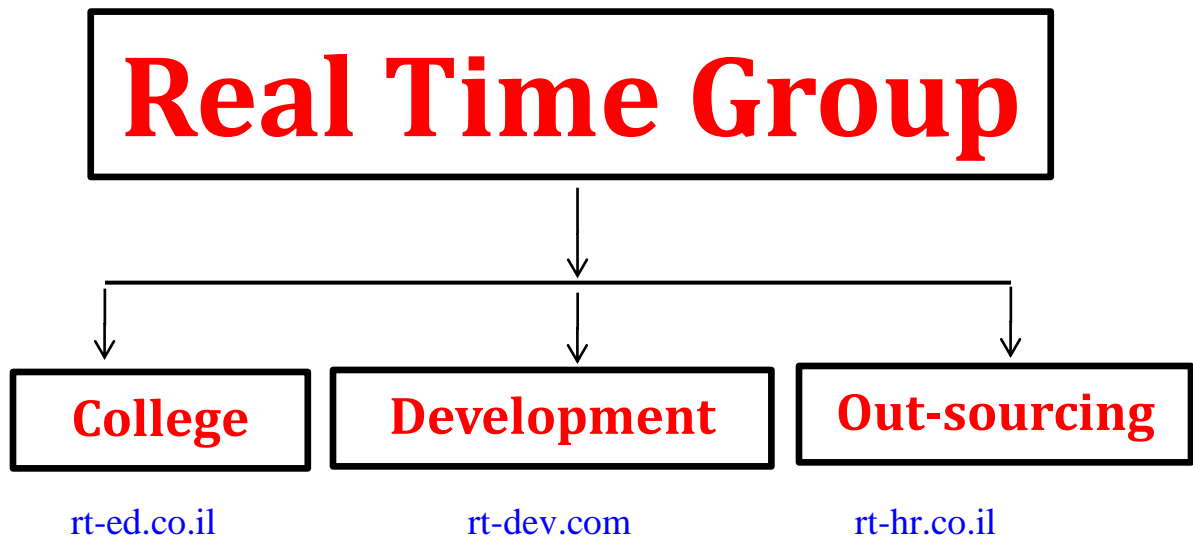
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Real Time Group is a multi-disciplinary dynamic and innovative Real-Time O.S. and Software Solutions Center, established in 2007.

Providing Software solutions, professional services and consulting, end-to-end flexible system infrastructure, outsourcing, integration and training services for Hardware, Software and RT-OS \ Embedded Systems.

The company is divided into the following three Divisions:



Training Division:

Professional Training Services for Software, Machine Learning and Computer Vision, RT-OS and Embedded systems industries.

We provide the knowledge and experience needed to enable professional engineers to Develop, Integrate and QA Hardware, Software and Networking Projects.

In order to insure experience, all courses are practical – hands-on-training. The latest Development, QA and Automation equipment which are adopted by the industry are used.

Students are supplied with suitable Development-Boards in order to run real Machine Learning Application.

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Course Overview:

This Machine Learning Course is part of the [Machine Learning Full Path](#)

RT-Group's Machine Learning \ Deep learning hand-on-training course, provides the most complete and comprehensive Machine Learning Engineering Course.

It's designed to provide the knowledge, development tools, the experience needed in order to place you as a Machine Learning Developer and help you integrate in the Israeli \ word-wide Hi-Tech industry.

Who should attend:

- System programmers \ Engineers who wish to learn ML.
- Students who wish to specialize in\work as Data Analysts \ Business Intelligence \ Data Science
- Students who wish to specialize in\work Computer Vision

Prerequisite:

- Basic Computer skills (Operating windows OS).
- Basic knowledge in math and statistics (no need to be a mathematician just the basics).
- Knowledge of computer Programming with Python (which is taught as part of [Machine Learning Full Path](#)).

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Machine Learning with Python Curriculum

Machine Learning Mathematical tools

1. Linear Algebra (using numpy)
 - Linear Regression
 - Octave/Mathlab Tutorial
2. Statistics
 - outliers,
 - scaling,
 - normalization,
 - correlation (ski learn)
3. Confusion Matrix, ROC

Machine Learning Software Tools

4. Jupyter Notebook
5. Model Deployment
6. Working with Cloud:
 - Azure,
 - AWS,
 - Google cloud,
 - micro-services
7. Working with Data-Bases:
 - SQL,
 - NoSQL,
 - MongoDB,
 - Elastic search

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Implementing Machine Learning with Python

8. CRISP-DM
9. Data preprocessing, data exploration
10. Data modeling, model evaluation
11. Feature Engineering
12. Linear regression
13. Logistic regression
14. Cross Validation
15. Overfitting
16. Lift Charts
17. Decision Trees
18. KNN, K-Means, GMM
19. Hierarchical clustering:
 - DBscan
 - GMM
20. Ensemble
21. SVM
22. PCA, LDA
23. Naïve Bayes
24. Time series, Anomaly Detection
25. Association Rules

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- 26. Reinforcement Learning
- 27. Dimensions reduction
- 28. NLP
- 29. Classifying documents

הערות :

- ✓ פתיחת המסלול מותנה במספר נרשמים.
- ✓ המכללה מביאה ידעתם של המשתתפים שיתכנו שינויים בתוכן הקורסים ובמועדם.
- ✓ המכללה מתחייבת להודיע המשתתפים על כל שינוי.
- ✓ המכללה שומרת לעצמה את הזכות לשנות את תכני המסלול בהתאם לשיקול דעתה הבלעדית.

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