



**1337AI**

# The Entry-Level ML Engineer Boot-camp!

Your First Steps in AI

*Summary: The goal of the week is to get started with the Python language and data manipulation.*

# Chapter I

## Introduction

Welcome to the Entry-Level ML Engineer Bootcamp! This bootcamp is designed as an entry point for anyone looking to start their journey in AI and machine learning. You'll learn the fundamentals of ML through structured modules, hands-on exercises, and curated resources.

The bootcamp is divided into four modules, with each module lasting one week, allowing you to complete the program in a month. Every week, you'll find exercises and resources to help you grasp key concepts. Additionally, we've included exploration questions to encourage deeper learning and creative thinking.

Our goal is that by the end of the bootcamp, participants will be able to collect and clean data, train machine learning models, and deploy them. Each week, you will focus on one essential skill that builds towards this goal.

We strongly encourage peer-to-peer learning—you'll gain so much by discussing and collaborating with others!

If you have any questions, feel free to ask in the community. Let's learn and grow together!

# Chapter II

## Common Instructions


- The version of Python recommended to use is 3.12, you can check the version of Python with the following command: `python -V`
- The norm: during this Boot camp, it is recommended to follow the [PEP 8 standards](#), though it is not mandatory. You can install [pycodestyle](#) which is a tool to check your Python code.
- The function `eval` is never allowed.
- The exercises are ordered from the easiest to the hardest.
- Your exercises are going to be evaluated by someone else, so make sure that your variable names and function names are appropriate and civil.
- Your manual is the internet.
- You can access our community on Whats App and ask your Questions for your peers in the dedicated Boot camp channel.
- If you find any issue or mistake in the subject please get in touch with us or create an issue on 1337-AI repository on Github.
- Submit your work to your git repository. Only the work in the git repository will be graded

# Contents

<b>I</b>	<b>Introduction</b>	<b>1</b>
<b>II</b>	<b>Common Instructions</b>	<b>2</b>
<b>III</b>	<b>Week-01: Data processing</b>	<b>4</b>

# Chapter III

## Week-01: Data processing

	Exercise : all
Data Preprocessing	
Turn-in directory : <i>exall/</i>	
Files to turn in : <code>notebook.ipynb</code>	
Forbidden functions : None	

This week, you will explore how to preprocess data before fitting it to your model. All exercises can be found in the link [notebook](#), and all exercises must be solved in the given notebook format.



`jupyter notebook`  
`Python for Data Analysis, 3E`



Now that you are able to preprocess the data, you can start thinking about advanced techniques like correlation analysis and hypothesis testing.

## Contact

You can contact 1337AI organization by email: [contact@1337ai.org](mailto:contact@1337ai.org)

Find all the relevant and up-to-date information about 1337AI on [our Website](#) !

Join our Discord server to connect with peers, ask questions, and collaborate: [Join here](#)

Thank you for attending the Entry-Level ML Engineer Boot-camp!

This work is licensed under a [Creative Commons](#) “[Attribution-NonCommercial-ShareAlike 4.0 International](#)” license.

