Text readability report generated on **2019-12-13 07:07**.

Readability Grade Levels	
Flesch-Kincaid Grade Level	11.1
Gunning Fog Index	13.1
Coleman-Liau Index	13.8
SMOG Index	13.4
Automated Readability Index	10.4
FORCAST Grade Level	12.0
Powers Sumner Kearl Grade	6.1
Rix Readability	9
Raygor Readability	n/a
Fry Readability	n/a

ReadablePro Rating
C

Readability Scores	
Flesch Reading Ease	37.6
CEFR Level	B1
IELTS Level	4-5
Spache Score	5.3
New Dale-Chall Score	8.4
Lix Readability	45
Lensear Write	69.5

Text Quality		
Spelling Issues	5	2%
Grammar Issues	2	11%
Sentences > 30 Syllables	3	16%
Sentences > 20 Syllables	13	68%
Words > 4 Syllables	9	4%
Words > 12 Letters	0	0%

Writing Style		
Passive Voice Count	5	4%
Adverb Count	6	3%
Cliché Count	0	0%

Text aimed at a general public audience should be around grade 8 to 10.

Text Statistics

Text Composition		
Adjectives	18	8%
Adverbs	2	1%
Conjunctions	16	7%
Determiners	22	9%
Interjections	0	0%
Nouns	95	40%
Proper Nouns	18	8%
Prepositions	22	9%
Pronouns	9	4%
Qualifiers	4	2%
Verbs	52	22%
Unrecognised	0	0%
Non-Words	0	0%

Text Statistics	
Character Count	1297
Syllable Count	442
Word Count	239
Unique Word Count	135
Sentence Count	19
Paragraph Count	2

Text Statistics Averages	
Characters per Word	5.4
Syllables per Word	1.8
Words per Sentence	12.6
Words per Paragraph	119.5
Sentences per Paragraph	9.5

Timings	
Reading Time	1:03
Speaking Time	1:54

Longest Sentences by Word Count
19 ("it cannot be used in deep learning frameworks such as keras as it decreases the accuracy of the models")

Longest Word(s) by Syllable Count
5 ("multiprocessing", "classification", "parallelizing", "significantly", "convolutional")

Longest Word(s) by Letter Count
15 ("multiprocessing")

Content Composition

Tone	
« Formal	Conversational »

Sentiment	
« Negative	Positive »

Gender	
« Female	Male »

Keyword Density

Keyword Density - 1 Word	
used	2.45%
is	2.04%
computing	2.04%
The	2.04%
parallel	1.63%
be	1.63%
Multiprocessing	1.63%
project	1.22%
multiple	1.22%
module	1.22%
has	1.22%
core	1.22%
cannot	1.22%
can	1.22%
Ray	1.22%

Keyword Density - 2 Words	
be used	1.63%
cannot be	1.22%
this project	0.82%
such as	0.82%
project is	0.82%
parallel processing	0.82%
parallel computing	0.82%
in this	0.82%
image classification	0.82%
for parallel	0.82%
Ray can	0.82%
Multiprocessing module	0.82%

Keyword Density - 3 Words	
cannot be used	1.22%
used in this	0.82%
this project is	0.82%
in this project	0.82%

Text Issues Highlighted

Please note that you can find the key for the colours used to highlight issues in this text on the first page of this report, in the "Text Quality" and "Writing Style" sections.

In recent years, parallel computing and soft computing has become a rapidly evolving field of study. The demand for parallel processing in increasing day by day. There are various software tools and libraries by which we can parallelize our programs. For example, we have OPENMP in c++ for parallel computing. OPENMP supports FORTRAN, C and C++. It is basically an Application Programming Interface for shared Memory Model programming. Python has its separate parallel processing module named Multiprocessing. Multiprocessing module enables to spawn multiple processes, allowing programmer to fully leverage the computing power of multiple processors. The main drawback of Python's Multiprocessing module is that it cannot be used for handling large numeric data. It cannot be used in Deep Learning Frameworks such as Keras as it decreases the accuracy of the models. Shared variables cannot be used in the Multiprocessing Module. Python also has a Parallel and Distributed computing framework called Ray. Ray can be used for developing emerging AI applications such as image classification, face recognition etc. Parallelizing multiple cores of CPU using Ray can also increase the speedup of the model significantly. The benchmark image classification algorithm used in this project is Convolutional Neural Network. The Dataset used in this project is Plant Disease Image dataset containing around 30000 images. The system is configured with 16 GB RAM with 4 CPU Cores and Tesla P100 GPU. This project compares the performance of 2-core, 3-core and 4-core parallelized CPUs with GPU.