DNA Flieber Test

Magneto wants to recruit as many mutants as possible so he can fight the X-Men.
He has hired you to develop a project that detects if a human is a mutant based on his DNA sequence.
For that he has asked you to create a program with a method or function with the following signature:

- boolean isMutant (String [] dna); // Java example

Where you will receive as a parameter an array of Strings that represent each row of a table of (NxN) with the DNA sequence. The letters of the Strings can only be: (A, T, C, G), which represents each nitrogenous base of DNA.

No-Mutant
A T G C G A
C A G T G C
T T A T T T
A G A C G G
G C G T C A
T C A C T G

Is-Mutant
A T G C G A
C A G T G C
T T A T G T
A G A A G G
C C C C T A
T C A C T G

You will know if a human is a mutant, if you find more than one sequence of four equal letters, obliquely, horizontally or vertically. Example (Mutant case):
String [] dna = {"ATGCGA", "CAGTGC", "TTATGT", "AGAAGG", "CCCCTA", "TCACTG"};

In this case the call to the isMutant (dna) function returns "true". Develop the algorithm as efficiently as possible. Challenges:

Level 1:

Program (in any programming language) that complies with the method requested by Magneto.

Level 2:

Create a REST API, host that API in a free cloud computing (Google App Engine, Amazon AWS, etc.), create the “/ mutant /” service where it can be detected if a human is a mutant by sending the DNA sequence through HTTP POST with a JSON which has the following format: POST → / mutant / {“dna”: ["ATGCGA", "CAGTGC", "TTATGT", "AGAAGG", "CCCCTA", "TCACTG"]}

In case of verifying a mutant, it should return an HTTP 200-OK, otherwise a 403-Forbidden

Level 3:

Append a database, which stores the DNA's verified with the API. Only 1 record per DNA. Expose an extra endpoint “/ stats” that returns a JSON with the statistics of the DNA checks: {"count_mutant_dna": 40, "count_human_dna": 100, "ratio": 0.4} Bear in mind that the API can receive aggressive fluctuations traffic (Between 100 and 1 million requests per second). Test-Automatic, Code coverage> 80%.