Title: Sparse Matrix

Content: A sparse matrix or sparse array is a matrix in which most of the elements are zero. By contrast, if most of the elements are nonzero, then the matrix is considered dense. The number of zero-valued

elements divided by the total number of elements (e.g., m x n for an m X n matrix) is called the

sparsity of the matrix (which is equal to 1 minus the density of the matrix). Storing a sparse matrix

A matrix is typically stored as a two-dimensional array. Each entry in the array represents an

element ai, j of the matrix and is accessed by the two indices i and j. Conventionally, i is the row

index, numbered from top to bottom, and j is the column index, numbered from left to right. For an

m x n matrix, the amount of memory required to store the matrix in this format is proportional to

m X n (disregarding the fact that the dimensions of the matrix also need to be stored). In the case of

a sparse matrix, substantial memory requirement reductions can be realized by storing only the

non-zero entries. Depending on the number and distribution of the non-zero entries, different data

structures can be used and yield huge savings in memory when compared to the basic approach.

The trade-off is that accessing the individual elements becomes more complex and additional

structures are needed to be able to recover the original matrix unambiguously. Formats can be

divided into two groups: Those that support efficient modification, such as DOK (Dictionary of

keys), LIL (List of lists), or COO (Coordinate list). These are typically used to construct the

matrices. Those that support efficient access and matrix operations, such as CSR (Compressed

Sparse Row) or CSC (Compressed Sparse Column).

Author:

Anca Manea

Title: Life as a student

Content: That's a great question best answered by our current and recent students. We have included a number of student articles on this website, and will happily connect you with others if needed.

Check out student blog posts, recent news, photos, videos and more here.

Do you know which programme you want to enrol in? If yes, you can ask the associated programme coordinator about what being a student of, say, carpentry, is like.

Author:

Adrian

Title: Visit Paris

Content: 1) The Buildings and Monuments

Paris has some beautiful and historic buildings and monuments. Here are some that you must see

(click on the links to get more information and see a photograph):

The Eiffel Tower - the most famous of all, and one of the most iconic constructions in the World.

2) The Food and Wine

Sample the many delicious cheeses, bread, patisserie, pates, the great French wines, the gourmet

restaurants, as well as paying a visit to the Champagne Region, which is just a day trip away.

3) The Shopping and Fashion

Go for the Sales, visit the great department stores Lafayette and Printemps, stroll along the

Champs Elysees, or visit the annual fashion shows.

Author:

Anca

Title: Hello World

Content: la la la la la

Author:

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Title: Proiect Practica 2018	
Content:	CerinÈ>e:
	Consider $\tilde{A}\phi$ nd o baza de date cu minim 4 tabele, fiecare cu 3 coloane si minim 5 inregistrari se cere:
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	- Sa se genereze pe baza xml-urilor create rapoarte in format .pdf si .html cu datele din tabele
	- Sa se fac $\ddot{A}f$ un meniu al aplica \dot{E} iei in care sa contina:
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	* salvarea datelor referitoare la diversele conexiuni cu posibilitae de criptare decriptare parola
	* buton pentru generare de xml,
	* buton pentru alegerea caii unde vor fi salvate fiÈ TM ierele xml,
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	* buton de generare fiÈ TM iere pdf + cale aferenta

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