Aplications Algorithm 1 Mathematics Algorithm 2 Algorithm 3

Applications
Definitions
and data
structures
Prim
Algorithms
Kruskal

C++ GRAPH PROCESSING LIBRARY

Estructuras abstractas de datos y algoritmos

Universidad de Costa Rica

10 Oct 2013

Outline

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Introduction

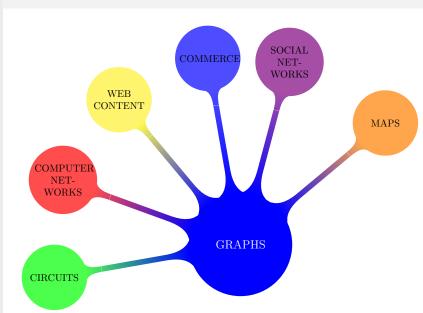
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Applications

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Definitions

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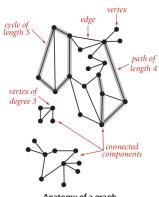
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Definition

A graph is a set of vertices and a collection of edges that each connect a pair of vertices.

- Vertex/Node
- Edge
- Path
- Cycle
- Connected -Unconnected Graph
- Length
- Tree, forest



Anatomy of a graph

Data Structures

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Algorithm 2

Prim Kruskal





Bag objects adil 6 representations of the same edge 10

Figure 2: Adjacency List

	1	2	3	4
1	Т	Т	F	Т
2	Т	Т	Т	F
3	F	Т	Т	Т
4	Т	F	Т	Т



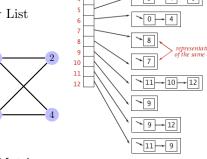


Figure 3: Adjacency Matrix

Definitions and applications

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- Use tabular for basic tables see Table 1, for example.
- You can upload a figure (JPEG, PNG or PDF) using the files menu.
- To include it in your document, use the includegraphics command (see the comment below in the source code).

Item	Quantity
Widgets	42
Gadgets	13

Table 1: An example table.

Readable Mathematics

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Shortest