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List of Notation & Abbreviations

(Alphabetical Order)

A	Set of Directed Edges in G
AC	Accepted Chromosomes Copies
C	A Cutset or a Subset of Cut
C_{max}	Maximum Flow Capacity of the Network
CA	Cut-capacity Column Vector
CRR	Capacity Related Reliability
$C(x)$	Total Cost of Network Design
CRR	Capacity Related Reliability
$CRR(x)$	Reliability of Network Design
CRR_{Net}	Desired Minimum Network Reliability Constraint
c_{ij}	Link Cost/Length
$c_{ij(max)}$	Maximum Cost/Length
CP	Composite Path
CPU	Central Processing Unit
E	Set of Vertices in G
G	Reliability Graph
GA	Genetic Algorithm
i, j	Index
k	Type or Option of the Link
l_{ij}	Number of Connections in a Single Type of the Link (Set of Possible Links)
L	Set of Possible Links
MVI	Multiple Variable Inversion
N_s	Current Capacity of Network
N	Total Number of Nodes in G
NF	Normalized Fitness Value
$NPOC$	Non Path or Cutset
NSP	Non Series Parallel
POC	Path or Cutset
R_l	Reliability of Link Option
SC	Subset Cut
SCG	Subset Cut Group
SDP	Sum of Disjoint Product
SP	Series Parallel
s, t	Source, Terminal Nodes
SVI	Single Variable Inversion
TR	Terminal Reliability
V	Set of Edges in G
W_{min}	Desired Flow Through Network
x	Binary String that can be Used as a Chromosome
x_{ij}	Link Connection Between Two Nodes i and j

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