A Bibliography of Tree Drawing Algorithms

Nelson H. F. Beebe
University of Utah
Department of Mathematics, 110 LCB
155 S 1400 E RM 233
Salt Lake City, UT 84112-0090
USA
Tel: +1 801 581 5254
FAX: +1 801 581 4148
E-mail: beebe@math.utah.edu, beebe@acm.org,
beebe@computer.org (Internet)
WWW URL: http://www.math.utah.edu/~beebe/

27 January 2015
Version 3.26

Abstract
This bibliography collects papers and reports on algorithms for the drawing of trees.

Title word cross-reference

4 [KH97]. h [MPS94]. k [Val97]. O(n²) [CS97]. v [MPS94].
- [MPS94]. -connected [KH97].
1st [NS87].
2 [FKK97]. 2- [CS97]. 2-Visibility [FKK97]. 2D [ARRM97]. 2nd [ACM89].
3 [BSWW97, DLV93, LD95]. 3- [CS97]. 3-D [BSWW97]. 3-Dimensional [LD95].
3-Planar [DLV93]. 3D [ARRM97, CT95]. 3DCube [PV97].
4-colorable [CS97].
5th [Di 97].
'87 [NS87].
'91 [MK91]. '94 [TT95]. '95 [Bra96]. '96 [Nor97].
action [KR91]. Acyclic
[CG95, DGLP97, DT88, HL96]. Ada [BL86].
Adocs [Ber95]. Advances [GT94].
Aesthetics [PCJ95]. Agraph [Nor02a].
aided [Car80]. Alberta [MK91].
Algorithm [BFGT97, CP95a, GT97, KT97, KRB95, RNN97, See97, SM95b, Thi96,
CP95b, KK89, MAUY98]. Algoritms
[BHR95, BDLT95, DT88, EFL97, ESW97, FK97a, Foe97, GT94b, PT95a, SSH+98, SKC96, SKC00, Til81]. analysis [Car80].


Applications [Cla90, GT97, NK94, GN00, KH97]. Approach [BMT97, MR95, MB91]. approximability [Pen02]. Arbitrary [GR02]. Archaeology [HMPT97]. ArchE [HMPT97]. Area [BK97, CGKT97, Cha02, CP95c, CP97a, GR02, LE97, PT98, SKC96, SKC00, Kim97, Tre96b, Tre96a].

Area-Ecient [SKC96, BK97, SKC00].

ary [Rad88]. Aspect [CGKT97, DGK98, GR02]. Attribute [ZM96]. Automatic [Car80, JLM97, Par95, See97, TdB88].

Autostereograms [Thi96]. AVL [CP95c, Kim97].

Balanced [DGK98]. Barzdin [ESW96]. Based [ARRM97, NT87, SM95a]. Bend [FK95b, FK95a]. Bend-Minimum [FK95b].


Binary [Cha02, CP97a, GR02, MPS94, SSH+98]. Bipartite [FK97b]. books [MB91]. Bound [Cha02]. Bounds [Bie95, FK97a, Foe97, GT94b, PT95a, TV99]. Browser [RDM+87]. Browsers [ARRM97].

Calgary [MK91]. California [Nor97]. CG [MSG95]. charts [BL86]. chemical [Fuj95]. circuit [MB91]. Clan [SM95a].

Clan-Based [SM95a]. Class [See97, Thi96]. Clustered [EF97, EFL97, FCE95].


corrigendum [ABJT04]. Cost [GT97]. Crossing [Val97, War77]. Cubic [CP95a, RNN97].

D [BSW97]. DAG [GNV88]. Data [Mal82, Fra81]. decision [Car80].

Decomposition [SM95a]. Definition [vOV96]. Degree [FK95a, PT98]. Depth [MAUY98]. Depth-first [MAUY98].

Design [ARRM97, KR91]. Designing [Bra95].

Diag [Sey92]. Diagrams [Lan82, Lev90, See97, Thi97, GS85, MB91, Ohl95, TdB88]. Diagraphs [CG95].

Digraphs [CDTT95, Par95, DT88, HL96, CDTT95].

DIMACS [TT95]. Dimensional [CELR95, EHW97, ESW97, PV97, DN97, ESW96, PT97, LD95]. Dimensions [EG95, HE03, PT97]. Directed [BHR95, DGLP97, FK95b, GKNV93, Ign95, NT87, New98, RDM+87, SM95a, Fra81, FR91, GNV88]. display [Car80]. dot [KN91, GKN02, Kou96a]. dotty [Kou94a, Kou96b]. Draw [FCE95, LL95].

Drawable [ELLM95, LL97]. drawer [Swe91]. Drawing [ARRM97, BDGS97, Ber95, BSW97, BMT97, BGR95, BHR95, BGT97, BFGT97, BKW89, BKW90, BJL06, BL86, BDLT95, CP95a, CS97, Cha02, CELR95, CG95, CT95, DH96, DN97, DGLP97, Dj95, DGK98, Ead84, EW94, EG95, EM95, Ead96, EF97, ECH97, EFL97, ESW97, FK95b, FK95a, Foe97, FHH+93, FR91, GKNV93, GKN02, Gan03, GT94a, Gar95, GT97, Gro95, HIIN99, HE03, Hop71, HMPT97, Igo95,}
implementation [KR91]. Improved [PT95a]. Incremental [Norxx, PT97, TBC97, BK97]. Influence [ELLM95], information [To196]. Ink [JRZ95]. Interactive [BFGT97, DL97, Foe97, PT95b, Lew75]. Interactive Giotto [BFGT97]. Interface [ACM90, MK91]. International [ACM89, Di 97, TT95]. Issues [PT95b]. Italy [Di 97].

Jersey [ACM89, TT95]. June [MK91].

Knowledge [NT87]. Kolmogorov [ESW96].


Navigation [ECH97, TBC97]. Near [Cha02]. Near-Linear [Cha02]. NEATO [Nor02b, Nor92]. Networks [TX95]. Nice [BGRT95, FK97b]. Nicely [BKW89, BKW90, SR83, ABJT04, DH96]. no [Val97]. Nodes [Wal80, Wal91]. non [vdP14]. non-layered [vdP14]. Nonplanar [FK97a]. note [Tre96b, Tre96a]. Number [BDD98, DL97]. Numbers [FK95a].

Object [See97, KS90]. Object-Oriented [See97, KS90]. Objects [BGRT95, VA88]. October [ACM89, ACM90, TT95]. octree [VA88]. octree-represented [VA88]. Online [ECH97]. open [GN00]. Optigraph [Ig95]. Optimal [Bie96, CP95c, DLV93, RNN97]. Optimal-Area [CP95c]. Optimizing [CGKT97]. Oriented [See97, KS90]. Orthogonal [BDD98, BK94, Bie95, Bie96, BSWW97, BMT97, BFGT97, CP95a, CGKT97, DLV93, DL97, EF97, ESW97, FK95b, FK97a, Foe97, PT95a, PT95b, PT97, PT98, RNN97, ESW96, TT9V1]. Outerplanar [LL95].

Package [VD93, VD94]. Pairwise [Val97]. Parallel [CDTT95, DLV93, HIIN99, MPS94]. Parsing [MSG95]. Passau [Bra96]. graph [KS90]. Phase [BMT97]. PhyloDraw [CJKC00]. phylogenetic [CJKC00]. Pictures [Kon94b, Kon96c, KD91]. Pitfalls [JLM97]. Placement [FR91]. Planar [CDTT95, CG95, DV96, EG95, FCE95, FK95b, FKK97, FK97b, GT94b, HK95, Hop71, LE97, CP95b, HL96, TTV91, DLV93]. Plane [Bie96, CN95, Dji95, FH+93, JRZ95, RNN96, RNN97, DT88, KH97, SSH+98]. Planes [HKR95]. posets [DN97].

problems [KH97]. Proceedings
[ACM89, ACM90, Bra96, Di 97, MK91,
NS87, Nor97, TT95]. Program
[Hop71, Lau82, GNV88, Swe78].
Projections [BGRT95]. Prototyping
[BDLT95]. Proximity [LD95].
Query [TBC97].

Randomized [BHR95]. Ratio
[CGKT97, DGK98, GR02]. readability
[TdB88]. Real [Par95]. Real-Time [Par95].
Recognizing [ELLM95]. Rectangle
[ELLM95]. Rectangular [RNN96].
Refinement [TBC97]. Regular
[HK95, KH97]. Relations [vOV96]. Report
[EM95]. Representations [DLV93, DT88].
represented [VA88]. Requirements
[KS90, LE97]. Resolution
[FHH93, GT94b]. Rome [Di 97]. rooted
[BJL06]. Routine [Lev90].

Screens [KR95]. Search [CP97b].
September [Bra96, Di 97, NS87, Nor97].
Series [CDTT95, DLV93]. Series-Parallel
[CDTT95, DLV93]. Service [BGT97].
SIGGRAPH [ACM90]. Simple
[KRB95, SM95b]. Simulated [CT95, DH96].
Simulator [Par95]. single [HL96].
single-source [HL96]. Small
[KRB95, PT98]. Snowbird [ACM90].
Software [ACM89, ACM90, NS87, See97,
GN00, VD93, VD94]. source [HL96]. Space
[BGRT95, LD95]. Specification [Mal82].
Spheres [HKR95]. Spirality [DV93].
Spline [vOV96]. Splines [vOV96]. Spring
[SM95b]. ST [CDTT95]. ST-Digraphs
[CDTT95]. static [BK97]. Sticky [vOV96].
Straight
[CGKT97, EFL97, GR02, SKC96, SKC00].
Straight-Line
[CGKT97, EFL97, GR02, SKC96, SKC00].
Strasbourg [NS87]. Stressed [EG95].
structural [Fu95]. structure [BL86].

Structures
[Ber95, vOV96, STT81, Fra81, Leg91, Lew75].
Study [DGLP97]. subdivisions [GS85].
Sugiyana [See97]. supported [KR91].
Surfaces [Zit94]. Symmetrically [HE03].
Symmetry [MAC95]. Symposium
[ACM90, Bra96, Di 97, Nor97]. Syntax
[Fra81, Thi97]. Syntax-directed [Fra81].
System [Ber95, BDLT95, HMPT97,
MAC95, MSG95, Par95, STT81, CJKC00,
GN00, Lew75].

Tcl [EN96]. TclDG [EN96]. technical
[KD91]. Technique [GKNV93]. techniques
[ESW96]. Technology [ACM90].
Telecommunication [TX95]. Testing
[BDLT95]. text [MB91]. Their [DGK98].
Theory [War77]. Third [ACM90]. Three
[BMT97, CELR95, EG95, IHW97, ESW96,
HE03, PTT97, PT97, PV97, ESW96].
Three-Dimensional
[CEL95, EHW97, PTT97, ESW96].
Three-Phase [BMT97]. Tidier [RT81].
Tidy [Rad88, WS79, vdP14]. Time
[Par95, BJL06, CP95b, vdP14]. Tool
[DL97, PV97]. Topological [vOV96].
Toroidal [MR95]. Translation [BGT97].
Tree [CGKT97, HII99, SKC96, Till91,
CJKC00, KS90, Leg91, Lew75, Pen02,
SKC00, Swo91, Lew75]. tree/graph [KS90].
TREECON [VD94, VD93].

Trees
[BKW89, BKW90, Cha02, CDTT95, CP95c,
CP97a, CP97b, CG95, DGK98, GR02, HE03,
LD95, MPS94, Moe90, Rad88, RT81, SR83,
Vau80, Wal80, Wa91, WS79, ABJT04,
Bjar6, Kim97, MAUY98, SSH98, Tre96b,
Tre96a, VD93, VD94, vdP14, JLM97, Epp85].
Triangular [DV96]. Triangulations
[LL95, LL97]. Triconnected
[Bie96, RNN97]. Tutorial [Nor02a]. Two
[ESW97, DN97, EW94, KD91, Pen02].
two-dimensional [DN97]. two-view
[KD91]. Types [Mal82].
REFERENCES

UIST [ACM90]. UML [See97]. Understanding [STT81]. undirected [KK89]. Unified [BMT97, SM95b]. Upward [CP95c, CP97b, FK95b, HKR95, HL96, JRZ95, MR95, SKC96, Kim97, Tre96b, Tre96a]. USA [ACM90, Nor97, TT95]. Use [DGK98]. User [ACM90, Nor92]. Uses [Cla90]. Using [Ign95, JRZ95, JLM97, MSG95, TBC97, DH96]. Utah [ACM90].


References

Akkerman:2004:CDT


ACM:1990:UTA


Anonymous:1985:M


Andalman:1997:DGB


Bertolazzi:1998:COD

REFERENCES

Berry:1997:GDM


Berti:1995:GSP


Bertault:1995:ADS


Bridgeman:1997:IAI


Biedl:1995:NLB


Biedl:1996:OOD


Buchheim:2006:DRT

[BJL06] Christoph Buchheim, Michael Jünger, and Sebastian Leipert. Drawing rooted trees in linear time.
REFERENCES


REFERENCES

Carpano:1980:ADH


Cohen:1995:DGD


Cohen:1995:TGD


Cruz:1995:DGE


Chan:1997:OAA


Chan:2002:NLA


Choi:2000:PPT


Clark:1990:TAP


Chrobak:1995:MGD

REFERENCES

**Calamoneri:1995:EOG**


**Calamoneri:1997:DG**


**Chrobak:1995:LTA**


**Cruz:1995:GDS**


**Crescenzi:1995:OUD**


**Crescenzi:1997:MHD**


**Crescenzi:1997:UDS**


**Duncan:1998:BAR**


**DiBattista:1997:DDA**


**Davidson:1996:DGN**

REFERENCES

DiBattista:1997:GDI


Djidjev:1995:DGC


Didimo:1997:GIT


DiBattista:1993:SOR


DeLaHiguera:1997:DET


DiBattista:1988:APR


DiBattista:1996:APT


Eades:1984:HGD


Eades:1996:GDM

REFERENCES

Eades:1997:OA


Eades:1997:DCG


Eades:1997:SDA


Eades:1995:DSP


Eades:1997:FBV


Eades:1997:GDC


Ellson:1996:TTE


Eppstein:1985:TT


Eades:1996:TKB

REFERENCES

Eades:1997:TAT


Eades:1994:DGT


Feng:1995:HDP


Formann:1993:DGP


Foessmeier:1995:DHD


Foessmeier:1995:BOU


Foessmeier:1997:AAB


Foessmeier:1997:NDP


Foessmeier:1997:DPG


Foessmeier:1997:IOG

Fruchterman:1991:GDF


Fraser:1981:SDE


Fujita:1995:XDC


Gansner:2003:DGG


Garg:1995:DAG


Gansner:2000:OGV


Gansner:2002:DGD


Gansner:1993:TDD


Gansner:1988:DPD


REFERENCES

mous ftp at ftp://forwiss.uni-passau.de/pub/local/graphed.


[SPEXBL] ISSN 0038-0644 (print), 1097-024X (electronic).


REFERENCES

Kim:1997:LWL


Kamada:1989:ADG


Koutsofios:1991:DGD


Koutsofios:1994:EGD


Koutsofios:1994:EPL


Koutsofios:1996:DGD


Koutsofios:1996:EGD


Koutsofios:1996:EPL


[Lev90] Michael J. S. Levine. A \LaTeX graphics routine for drawing Feynman diagrams. Computer Physics Communications, 58(1 and 2):181–198, February/March 1990. Available in the CPC library, and from listral@ib.rl.ac.uk with an e-mail request GET CPC INTRO CPCINDEX.
REFERENCES

Lewis:1975:TIS


Lenhart:1995:HDO


Lenhart:1997:DFM


Manning:1995:SDG


Mallgren:1982:FSG


Miyadera:1998:DFL


Macleanan:1991:ADC


MacKay:1991:GIC


Moen:1990:DDT


Metaxas:1994:PHD

Mohar:1995:FAU


McCreary:1995:CGD


Newbery:1989:ECM


North:1994:AGV


North:1992:NUG


North:1997:GDS


North:19xx:ILD


North:2002:AT


North:2002:DGN

REFERENCES


REFERENCES


REFERENCES

1997. CODEN LNCS-90. ISSN 0302-9743 (print), 1611-3349 (electronic).


[Tre96b] Luca Trevisan. A note on minimum-area upward drawing of complete...
REFERENCES


Tamassia:1995:GDD


Valtr:1997:GDN


Vaucer:1980:PPT


VandePeer:1993:TSP


VandePeer:1994:TWS


VanderPloeg:2014:DNL

REFERENCES


Overveld:1996:SSD


Walker:1991:PNG


Walker:1991:PNG


Warfield:1977:CTH


Zitnik:1994:DGS


Zitnik:1994:DGS


Zinssmeister:1996:DGA