[a4paper]book
geometry margin=1.5cm, vmargin=0pt,1cm -1cm 29.7cm 25.1cm
marginfix
amsfonts amsmath amssymb amsthm ctex enumerate graphicx layout multicol mathrsfs fancyhdr subfigure tcolorbox tikz-cd listings xcolor braket algorithm algorithmicx algpseudocode amsmath
algorithm : : Input : Precondition : Output : Postcondition : $[1]\langle 1\rangle\, d[1]\partial 1\partial x[1]\partial 1\partial yD[1]\langle 1\rangle sgnspandomarityIntE$
solutionSolution. [1]ifundefined11
$[1]\bar{1}iRe\,Im\,C^{\bullet}LogArgnullrangekerIsoAutordResGLSL[2]|1-2|$
$\int\!\!f\!\!\int\!\!\!\int f$
equationchapter definition
thmTheorem[chapter] axm[thm]Axiom alg[thm]Algorithm asm[thm]Assumption defn[thm]Definition prop[thm]Propo
rul[thm]Rule coro[thm]Corollary lem[thm]Lemma exmExample[chapter] remRemark[chapter] exc[exm]Exercise
frm[thm]Formula ntnNotation
rmk[thm]Remark
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keywordstyle=[RGB]40,40,255, numberstyle=darkgray, commentstyle=*[RGB]0,96,96, stringstyle=[RGB]128,0,0,*
showstringspaces=false, language=c++,
document empty roman
chapter0 arabic
Boolean3D Document
Yinset vector¡GluingClosedSurface¿ vecGCS

vector¡HasseNode¿ Hasse
Yinset meet(const Yinset&) const

Yinset join(const Yinset&) const

Yinset complement() const

buildHasse()
Hasse
GluingClosedSurface
vector¡Triangle¿ vecTriangle

bool orientation

SurfacePatch
vector¡Triangle¿ vecTriangle

vector¡pair¡Segment¿ boundary

reverse()

PrePaste
vector¡GluingClosedSurface¿ vecGCS

vector¡SurfacePatch¿ vecSP

operator()(const vector¡Triangle¿&)

Paste
vector¡GluingClosedSurface¿ operator()(const vector¡SurfacePatch¿&)

Locate
 bool operator()(const Point&, const GluingClosedSurface&)

TriangleIntersect
 vector¡pair¡vector¡Segment¿, vector¡vector¡Triangle¿::iterator¿¿¿ : resultA, reasultB

 operator()(const Triangle&, const Triangle&)

vector¡Triangle¿ collapse()
Triangulate

bool operator()(const Triangle&, const vector¡Segment¿&)
Triangle
 vector¡Point¿ vecPoint

pairt¡int,int¿ InFace
 Triangle¡2¿ project(int n)

intersect(const Line&)

intersectCoplane(const Line¡2¿&)
Triangle reverse()
Plane
 Real para[Dim+1]

  Real angle(const Plane&)

Line intersect(const Plane&

Line
 Point fixPoint

Vec dirct

  Line¡2¿ project(int n)

Edge
 Point endPoint[2]

 Edge¡2¿ project(int n)

Segment
 Point endPoint[2]

vector¡Triangle¿

Point
 Real coord[Dim]

Vec
 Real p[Dim]

 Real dot(const Vec&)

Real cross(const Vec&)
figure UML [width = 18cm]fig/Boolean3D.png