# GTree

#### P. Baillehache

## October 30, 2018

#### Contents

1	Interface	2
2	Code    2.1 pbmath.c     2.2 pbmath-inline.c	
3	Makefile	2
4	Unit tests	2
5	Unit tests output	2

## Introduction

GTree is a C library providing structures and functions to manipulate tree structures.

A GTree is a structure containing a pointer toward its parent, a void\* pointer toward user's data and a GSet of subtrees. The GTree offers the same interface has a GSet to manipulate its subtrees. It also provides a function to cut the GTree from its parent.

The library provides also three iterators to run through the trees: GTreeIterDepth, GTreeIterBreadth, GTreeIterValue which step, respectively, in depth first order, breadth first order and value (sorting value of the GSet of subtrees) first order.

It uses the PBErr and GSet libraries.

- 1 Interface
- 2 Code
- 2.1 pbmath.c
- 2.2 pbmath-inline.c
- 3 Makefile
- 4 Unit tests
- 5 Unit tests output