pointer:0x7f463c04b010
SgSourceFile

root node

SgNode* p_parent : 0x265c350
bool p_isModified : 0
bool p_containsTransformation : 0
$CLASSNAME* p_freepointer : 0xffffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f463c1fe068
SgStringList p_originalCommandLineArgumentList : [pdfGenerator, -std=c++11, -c, constructor.cpp]
int p_verbose : 0
bool p_output_warnings : 0
bool p_C_only : 0
bool p_UPC_only : 0
bool p_UPCxx_only : 0
int p_upc_threads : 0
bool p_C89_only : 0
bool p_C89_gnu_only : 0
bool p_C99_only : 0
bool p_C99_gnu_only : 0
bool p_Cxx_only : 1
bool p_C11_only : 0
bool p_C11_gnu_only : 0
bool p_Cxx0x_only : 0
bool p_Cxx11_only : 1
bool p_Cxx11_gnu_only : 0
bool p_C14_only : 0
bool p_C14_gnu_only : 0
bool p_Cxx14_only : 0
bool p_Cxx14_gnu_only : 0
bool p_Fortran_only : 0
bool p_F77_only : 0
bool p_F90_only : 0
bool p_F95_only : 0
bool p_F2003_only : 0
bool p_F2008_only : 0
bool p_CoArrayFortran_only : 0
bool p_Java_only : 0
bool p_X10_only : 0
bool p_PHP_only : 0
bool p_Python_only : 0
bool p_Cuda_only : 0
bool p_OpenCL_only : 0
bool p_requires_C_preprocessor : 0
bool p_binary_only : 0
SgFile::outputFormatOption_enum p_inputFormat : 2
SgFile::outputFormatOption_enum p_outputFormat : 2
SgFile::outputFormatOption_enum p_backendCompileFormat : 2
bool p_fortran_implicit_none : 0
bool p_openmp : 0
bool p_openmp_parse_only : 1
bool p_openmp_ast_only : 0
bool p_openmp_lowering : 0
bool p_cray_pointer_support : 0
bool p_failsafe : 0
bool p_output_parser_actions : 0
bool p_exit_after_parser : 0
bool p_skip_syntax_check : 0
bool p_relax_syntax_check : 0
bool p_skip_translation_from_edg_ast_to_rose_ast : 0
bool p_skip_transformation : 0
bool p_skip_unparse : 0
bool p_skipfinalCompileStep : 0
bool p_unparse_includes : 0
bool p_unparse_line_directives : 0
bool p_unparse_function_calls_using_operator_syntax : 0

pointer:0x7f463c179120
SgGlobal
/home/liao6/workspace/github/rose-ast.git/constructor.cpp 0:0
IsTransformation:0
IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode* p_parent : 0x7f463c04b010
bool p_isModified : 0
bool p_containsTransformation : 0
$CLASSNAME* p_freepointer : 0xffffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f463c1fe0c0
Sg_File_Info* p_endOfConstruct : 0x7f463c1fe118
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgSymbolTable* p_symbol_table : 0x7f463c12e140
SgTypeTable* p_type_table : 0x2696d98
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgDeclarationStatementPtrList p_declarations : <too long>: <too long>: [0x7f463bea0010, 0x7f463bea02b0, 0x7f463b9d1010, 0x7f463b9

pointer:0x7f463aa0f2b0
SgClassDeclaration
/home/liao6/workspace/github/rose-ast.git/constructor.cpp 1:1
IsTransformation:0
IsOutputInCodeGeneration:0
Declaration mangled name: class_VectorX

Click here to go to the parent node

SgNode* p_parent : 0x7f463c179120
bool p_isModified : 0
bool p_containsTransformation : 0
$CLASSNAME* p_freepointer : 0xffffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f463ac0a258
Sg_File_Info* p_endOfConstruct : 0x7f463ac0a2b0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
unsigned int p_decl_attributes : 0
std::string p_linkage :
SgDeclarationModifier p_declarationModifier : <too long>: <too long>: SgDeclarationModifier(isUnknown() = false isDefault() = false isFrie
bool p_nameOnly : 0
bool p_forward : 0
bool p_externBrace : 0
bool p_skipElaborateType : 0
SgDeclarationStatement* p_definingDeclaration : 0x7f463aa0f2b0
SgDeclarationStatement* p_firstNondefiningDeclaration : 0x7f463aa0f010
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label :
SgName p_name : VectorX
SgClassDeclaration::class_types p_class_type : 0
SgClassType* p_type : 0x7f463a9d0010
SgClassDefinition* p_definition : 0x7f463a93b010
SgScopeStatement* p_scope : 0x7f463c179120
SgDeclarationStatement::template_specialization_enum p_specialization : 1
bool p_from_template : 0
bool p_fixupScope : 0
bool p_isUnNamed : 0
bool p_explicit_annotation_interface : 0
bool p_explicit_interface : 0
bool p_explicit_enum : 0
bool p_explicit_anonymous : 0
SgExprListExp* p_decoratorList : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0
bool p_isAutonomousDeclaration : 1
bool p_isRepresentingTemplateParameterInTemplateDeclaration : 0

pointer:0x7f463a93b010
SgClassDefinition
/home/liao6/workspace/github/rose-ast.git/constructor.cpp 1:1
IsTransformation:0
IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode* p_parent : 0x7f463aa0f2b0
bool p_isModified : 0
bool p_containsTransformation : 0
$CLASSNAME* p_freepointer : 0xffffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f463ac0b228
Sg_File_Info* p_endOfConstruct : 0x7f463ac0b1d0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgSymbolTable* p_symbol_table : 0x7f463c12e3a0
SgTypeTable* p_type_table : 0x2696de8
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgDeclarationStatementPtrList p_members : [0x7f463a6b83f0, 0x7f463a3082a0]
SgBaseClassPtrList p_inheritances : []
unsigned int p_packingAlignment : 0
bool p_isSequence : 0
bool p_isPrivate : 0
bool p_isAbstract : 0

SgNode* p_parent : 0x7f463a93b010
bool p_isModified : 0
bool p_containsTransformation : 0
$CLASSNAME* p_freepointer : 0xffffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f463ac0a308
Sg_File_Info* p_endOfConstruct : 0x7f463ac0a360
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
unsigned int p_decl_attributes : 0
std::string p_linkage :
SgDeclarationModifier p_declarationModifier : <too long>: <too long>: SgDeclarationModifier(isUnknown() = false isDefault() = false isFrie
bool p_nameOnly : 0
bool p_forward : 0
bool p_externBrace : 0
bool p_skipElaborateType : 0
SgDeclarationStatement* p_definingDeclaration : 0x7f463a6b83f0
SgDeclarationStatement* p_firstNondefiningDeclaration : 0x7f463a6b8010
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label :
SgName p_name : VectorX
SgFunctionParameterList* p_parameterList : 0x7f463b16c860
SgFunctionModifier p_functionModifier : <too long>: <too long>: SgFunctionModifier(isUnknown() = false isDefault() = true isInline()
SgSpecialFunctionModifier p_specialFunctionModifier : <too long>: <too long>: SgSpecialFunctionModifier(isUnknown() = false isDefault()
SgTypePtrList p_exceptionSpecification : []
bool p_named_in_end_statement : 0
std::string p_asm_name :
SgExprListExp* p_decoratorList : 0
SgFunctionType* p_type : 0x7f463a89d010
SgFunctionDefinition* p_definition : 0x7f463a478010
bool p_oldStyleDefinition : 0
SgScopeStatement* p_scope : 0x7f463a93b010
SgDeclarationStatement::template_specialization_enum p_specialization : 1
bool p_requiresNameQualificationOnReturnType : 0
std::string p_gnu_extension_section :
std::string p_gnu_extension_alias :
SgDeclarationStatement::gnu_extension_visability_attribute_enum p_gnu_extension_visability : 1
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0
int p_name_qualification_length_for_return_type : 0
bool p_type_elaboration_required_for_return_type : 0
bool p_global_qualification_required_for_return_type : 0
bool p_prototypeIsWithoutParameters : 0
int p_gnu_regparm_attribute : -1
SgFunctionType* p_type_syntax : 0
bool p_type_syntax_is_available : 0
bool p_using_C11_Noreturn_keyword : 0
bool p_is_constexpr : 0
bool p_using_new_function_return_type_syntax : 0
SgFunctionParameterScope* p_functionParameterScope : 0
bool p_marked_as_edg_normalization : 0
SgCtorInitializerList* p_CtorInitializerList : 0x7f463a596260
SgClassDeclaration* p_associatedClassDeclaration : 0x7f463aa0f2b0

pointer:0x7f463b16c860
SgFunctionParameterList
/home/liao6/workspace/github/rose-ast.git/constructor.cpp 4:5
IsTransformation:0
IsOutputInCodeGeneration:0
Declaration mangled name: L3R

Click here to go to the parent node

SgNode* p_parent : 0x7f463a6b83f0
bool p_isModified : 0
bool p_containsTransformation : 0
$CLASSNAME* p_freepointer : 0xffffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f463ac0a938
Sg_File_Info* p_endOfConstruct : 0x7f463ac0a990
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
unsigned int p_decl_attributes : 0
std::string p_linkage :
SgDeclarationModifier p_declarationModifier : <too long>: <too long>: SgDeclarationModifier(isUnknown() = false isDefault() = true isFrien
bool p_nameOnly : 0
bool p_forward : 0
bool p_externBrace : 0
bool p_skipElaborateType : 0
SgDeclarationStatement* p_definingDeclaration : 0
SgDeclarationStatement* p_firstNondefiningDeclaration : 0x7f463b16c860
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label :
SgInitializedNamePtrList p_args : [0x7f463acf96e8]

Click here to go to the parent node

SgNode* p_parent : 0x7f463b16c860
bool p_isModified : 0
bool p_containsTransformation : 0
$CLASSNAME* p_freepointer : 0xffffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f463ac0a678
Sg_File_Info* p_endOfConstruct : 0x7f463ac0a6d0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgName p_name : xx
std::string p_microsoft_uuid_string :
SgType* p_typeptr : 0x7f463b87c010
SgInitializer* p_initptr : 0
SgInitializedName* p_prev_decl_item : 0
bool p_is_initializer : 1
SgDeclarationStatement* p_declptr : 0x7f463a6b83f0
SgStorageModifier* p_storageModifier : 0x32ec348
SgScopeStatement* p_scope : 0x7f463a478010
SgInitializedName::preinitialization_enum p_preinitialization : 0
bool p_isCoArray : 0
SgInitializedName::asm_register_name_enum p_register_name_code : 0
SgInitializedName::excess_specifier_enum p_excess_specifier : 0
std::string p_register_name_string :
bool p_requiresGlobalNameQualificationOnType : 0
bool p_shapeDeferred : 0
bool p_initializationDeferred : 0
SgBitVector p_gnu_attribute_modifierVector : [F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F]
unsigned long int p_gnu_attribute_initialization_priority : 0
std::string p_gnu_attribute_named_weak_reference :
std::string p_gnu_attribute_named_alias :
std::string p_gnu_attribute_cleanup_function :
std::string p_gnu_attribute_section_name :
int p_gnu_attribute_alignment : -1
SgDeclarationModifier::gnu_declaration_visability_enum p_gnu_attribute_visability : 0
bool p_protected_declaration : 0
int p_name_qualification_length_for_type : 0
bool p_type_elaboration_required_for_type : 0
bool p_global_qualification_required_for_type : 0
bool p_hasArrayTypeWithEmptyBracketSyntax : 0
bool p_using_C11_Alignas_keyword : 0
SgNode* p_constant_or_type_argument_for_Alignas_keyword : 0
bool p_using_auto_keyword : 0
bool p_using_device_keyword : 0
bool p_is_braced_initialized : 0

pointer:0x7f463a478010
SgFunctionDefinition
/home/liao6/workspace/github/rose-ast.git/constructor.cpp 4:24
IsTransformation:0
IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode* p_parent : 0x7f463a6b83f0
bool p_isModified : 0
bool p_containsTransformation : 0
$CLASSNAME* p_freepointer : 0xffffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f463ac0a728
Sg_File_Info* p_endOfConstruct : 0x7f463ac0a780
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgSymbolTable* p_symbol_table : 0x7f463c12e600
SgTypeTable* p_type_table : 0x2696e38
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgBasicBlock* p_body : 0x7f463a50d010
std::map<SgNode*,int> p_scope_number_list : []

pointer:0x7f463a50d010
SgBasicBlock
/home/liao6/workspace/github/rose-ast.git/constructor.cpp 4:24
IsTransformation:0
IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode* p_parent : 0x7f463a478010
bool p_isModified : 0
bool p_containsTransformation : 0
$CLASSNAME* p_freepointer : 0xffffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f463ac0a5c8
Sg_File_Info* p_endOfConstruct : 0x7f463ac0a620
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgSymbolTable* p_symbol_table : 0x7f463c12e4d0
SgTypeTable* p_type_table : 0x2696e10
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgStatementPtrList p_statements : [0x7f463a11a010]
std::string p_asm_function_body :

pointer:0x7f463a11a010
SgExprStatement
/home/liao6/workspace/github/rose-ast.git/constructor.cpp 4:25
IsTransformation:0
IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode* p_parent : 0x7f463a50d010
bool p_isModified : 0
bool p_containsTransformation : 0
$CLASSNAME* p_freepointer : 0xffffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f463ac0b120
Sg_File_Info* p_endOfConstruct : 0x7f463ac0b178
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgExpression* p_expression : 0x7f463a149010

Click here to go to the parent node

SgNode* p_parent : 0x7f463a11a010
bool p_isModified : 0
bool p_containsTransformation : 0
$CLASSNAME* p_freepointer : 0xffffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f463ac0b070
Sg_File_Info* p_endOfConstruct : 0x7f463ac0b0c8
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f463ac0ae08
SgExpression* p_lhs_operand_i : 0x7f463a180010
SgExpression* p_rhs_operand_i : 0x7f463a1b7078
SgType* p_expression_type : 0
SgExpression* p_originalExpressionTree : 0

pointer:0x7f463a180010
SgArrowExp
compilerGenerated 0:0
IsTransformation:0
IsOutputInCodeGeneration:1
Expression type: double

Click here to go to the parent node

SgNode* p_parent : 0x7f463a149010
bool p_isModified : 0
bool p_containsTransformation : 0
$CLASSNAME* p_freepointer : 0xffffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f463ac0ae60
Sg_File_Info* p_endOfConstruct : 0x7f463ac0aeb8
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 1
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f463ac0ab48
SgExpression* p_lhs_operand_i : 0x7f463a449010
SgExpression* p_rhs_operand_i : 0x7f463a1b7010
SgType* p_expression_type : 0
SgExpression* p_originalExpressionTree : 0

pointer:0x7f463a449010
SgThisExp
compilerGenerated 0:0
IsTransformation:0
IsOutputInCodeGeneration:1
Expression type: class ::VectorX{public: inline VectorX(double xx){(this) -> x = xx;}double x;}*

Click here to go to the parent node

SgNode* p_parent : 0x7f463a180010
bool p_isModified : 0
bool p_containsTransformation : 0
$CLASSNAME* p_freepointer : 0xffffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f463ac0aa40
Sg_File_Info* p_endOfConstruct : 0x7f463ac0aa98
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f463ac0a7d8
SgClassSymbol* p_class_symbol : 0x3366600
int p_pobj_this : 0

pointer:0x7f463a1b7010
SgVarRefExp
/home/liao6/workspace/github/rose-ast.git/constructor.cpp 4:25
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: double

Click here to go to the parent node

SgNode* p_parent : 0x7f463a180010
bool p_isModified : 0
bool p_containsTransformation : 0
$CLASSNAME* p_freepointer : 0xffffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f463ac0ad58
Sg_File_Info* p_endOfConstruct : 0x7f463ac0adb0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f463ac0aaf0
SgVariableSymbol* p_symbol : 0x3395af0
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0

pointer:0x7f463a1b7078
SgVarRefExp
/home/liao6/workspace/github/rose-ast.git/constructor.cpp 4:27
IsTransformation:0
IsOutputInCodeGeneration:0
Expression type: double

Click here to go to the parent node

SgNode* p_parent : 0x7f463a149010
bool p_isModified : 0
bool p_containsTransformation : 0
$CLASSNAME* p_freepointer : 0xffffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f463ac0af68
Sg_File_Info* p_endOfConstruct : 0x7f463ac0afc0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f463ac0ad00
SgVariableSymbol* p_symbol : 0x3395ac0
SgExpression* p_originalExpressionTree : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0

SgCtorInitializerList
NULL_FILE 0:0
IsTransformation:0
IsOutputInCodeGeneration:1
Declaration mangled name: class_VectorX_constructor_initialization_list_

Click here to go to the parent node

SgNode* p_parent : 0x7f463a6b83f0
bool p_isModified : 0
bool p_containsTransformation : 0
$CLASSNAME* p_freepointer : 0xffffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f463ac0a888
Sg_File_Info* p_endOfConstruct : 0x7f463ac0a8e0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
unsigned int p_decl_attributes : 0
std::string p_linkage :
SgDeclarationModifier p_declarationModifier : <too long>: <too long>: SgDeclarationModifier(isUnknown() = false isDefault() = true isFrien
bool p_nameOnly : 0
bool p_forward : 0
bool p_externBrace : 0
bool p_skipElaborateType : 0
SgDeclarationStatement* p_definingDeclaration : 0x7f463a596260
SgDeclarationStatement* p_firstNondefiningDeclaration : 0x7f463a596260
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label :
SgInitializedNamePtrList p_ctors : []

pointer:0x7f463a3082a0
SgVariableDeclaration
/home/liao6/workspace/github/rose-ast.git/constructor.cpp 6:5
IsTransformation:0
IsOutputInCodeGeneration:0
Declaration mangled name: class_VectorX_variable_declaration__variable_type_d_variable_name_class_VectorX__scope__x

Click here to go to the parent node

SgNode* p_parent : 0x7f463a93b010
bool p_isModified : 0
bool p_containsTransformation : 0
$CLASSNAME* p_freepointer : 0xffffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f463ac0b330
Sg_File_Info* p_endOfConstruct : 0x7f463ac0b388
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
unsigned int p_decl_attributes : 0
std::string p_linkage :
SgDeclarationModifier p_declarationModifier : <too long>: <too long>: SgDeclarationModifier(isUnknown() = false isDefault() = false isFrie
bool p_nameOnly : 1
bool p_forward : 0
bool p_externBrace : 0
bool p_skipElaborateType : 0
SgDeclarationStatement* p_definingDeclaration : 0
SgDeclarationStatement* p_firstNondefiningDeclaration : 0x7f463a3082a0
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label :
SgDeclarationStatement* p_baseTypeDefiningDeclaration : 0
SgInitializedNamePtrList p_variables : [0x7f463acf9978]
bool p_variableDeclarationContainsBaseTypeDefiningDeclaration : 0
SgDeclarationStatement::template_specialization_enum p_specialization : 1
bool p_requiresGlobalNameQualificationOnType : 0
std::string p_gnu_extension_section :
std::string p_gnu_extension_alias :
unsigned short p_gnu_extension_initialization_priority : 0
SgDeclarationStatement::gnu_extension_visability_attribute_enum p_gnu_extension_visability : 0
SgVariableDeclaration::gnu_extension_declaration_attributes_enum p_gnu_extension_declaration_attribute : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0
bool p_isAssociatedWithDeclarationList : 0
bool p_isFirstDeclarationOfDeclarationList : 1
bool p_is_thread_local : 0
bool p_is_constexpr : 0

pointer:0x7f463acf9978
SgInitializedName
/home/liao6/workspace/github/rose-ast.git/constructor.cpp 6:5
IsTransformation:0
IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode* p_parent : 0x7f463a3082a0
bool p_isModified : 0
bool p_containsTransformation : 0
$CLASSNAME* p_freepointer : 0xffffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f463ac0b2d8
Sg_File_Info* p_endOfConstruct : 0x7f463ac0b280
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgName p_name : x
std::string p_microsoft_uuid_string :
SgType* p_typeptr : 0x7f463b87c010
SgInitializer* p_initptr : 0
SgInitializedName* p_prev_decl_item : 0x7f463acf9830
bool p_is_initializer : 1
SgDeclarationStatement* p_declptr : 0x7f463a1ea258
SgStorageModifier* p_storageModifier : 0x32ec398
SgScopeStatement* p_scope : 0x7f463a93b010
SgInitializedName::preinitialization_enum p_preinitialization : 0
bool p_isCoArray : 0
SgInitializedName::asm_register_name_enum p_register_name_code : 0
SgInitializedName::excess_specifier_enum p_excess_specifier : 0
std::string p_register_name_string :
bool p_requiresGlobalNameQualificationOnType : 0
bool p_shapeDeferred : 0
bool p_initializationDeferred : 0
SgBitVector p_gnu_attribute_modifierVector : [F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F]
unsigned long int p_gnu_attribute_initialization_priority : 0
std::string p_gnu_attribute_named_weak_reference :
std::string p_gnu_attribute_named_alias :
std::string p_gnu_attribute_cleanup_function :
std::string p_gnu_attribute_section_name :
int p_gnu_attribute_alignment : -1
SgDeclarationModifier::gnu_declaration_visability_enum p_gnu_attribute_visability : 0
bool p_protected_declaration : 0
int p_name_qualification_length_for_type : 0
bool p_type_elaboration_required_for_type : 0
bool p_global_qualification_required_for_type : 0
bool p_hasArrayTypeWithEmptyBracketSyntax : 0
bool p_using_C11_Alignas_keyword : 0
SgNode* p_constant_or_type_argument_for_Alignas_keyword : 0
bool p_using_auto_keyword : 0
bool p_using_device_keyword : 0
bool p_is_braced_initialized : 0

Click here to go to the parent node

SgNode* p_parent : 0x7f463c179120
bool p_isModified : 0
bool p_containsTransformation : 0
$CLASSNAME* p_freepointer : 0xffffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f463ac0b438
Sg_File_Info* p_endOfConstruct : 0x7f463ac0b3e0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
unsigned int p_decl_attributes : 0
std::string p_linkage :
SgDeclarationModifier p_declarationModifier : <too long>: <too long>: SgDeclarationModifier(isUnknown() = false isDefault() = false isFrie
bool p_nameOnly : 0
bool p_forward : 0
bool p_externBrace : 0
bool p_skipElaborateType : 0
SgDeclarationStatement* p_definingDeclaration : 0x7f463b01c9e0
SgDeclarationStatement* p_firstNondefiningDeclaration : 0x7f463b01c610
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label :
SgName p_name : foo
SgFunctionParameterList* p_parameterList : 0x7f463b16cd00
SgFunctionModifier p_functionModifier : <too long>: <too long>: SgFunctionModifier(isUnknown() = false isDefault() = true isInline()
SgSpecialFunctionModifier p_specialFunctionModifier : <too long>: <too long>: SgSpecialFunctionModifier(isUnknown() = false isDefault()
SgTypePtrList p_exceptionSpecification : []
bool p_named_in_end_statement : 0
std::string p_asm_name :
SgExprListExp* p_decoratorList : 0
SgFunctionType* p_type : 0x7f463bbae1c0
SgFunctionDefinition* p_definition : 0x7f463a478140
bool p_oldStyleDefinition : 0
SgScopeStatement* p_scope : 0x7f463c179120
SgDeclarationStatement::template_specialization_enum p_specialization : 1
bool p_requiresNameQualificationOnReturnType : 0
std::string p_gnu_extension_section :
std::string p_gnu_extension_alias :
SgDeclarationStatement::gnu_extension_visability_attribute_enum p_gnu_extension_visability : 1
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0
int p_name_qualification_length_for_return_type : 0
bool p_type_elaboration_required_for_return_type : 0
bool p_global_qualification_required_for_return_type : 0
bool p_prototypeIsWithoutParameters : 0
int p_gnu_regparm_attribute : -1
SgFunctionType* p_type_syntax : 0
bool p_type_syntax_is_available : 0
bool p_using_C11_Noreturn_keyword : 0
bool p_is_constexpr : 0
bool p_using_new_function_return_type_syntax : 0
SgFunctionParameterScope* p_functionParameterScope : 0
bool p_marked_as_edg_normalization : 0

pointer:0x7f463b16cd00
SgFunctionParameterList
/home/liao6/workspace/github/rose-ast.git/constructor.cpp 8:1
IsTransformation:0
IsOutputInCodeGeneration:0
Declaration mangled name: L4R

Click here to go to the parent node

SgNode* p_parent : 0x7f463b01c9e0
bool p_isModified : 0
bool p_containsTransformation : 0
$CLASSNAME* p_freepointer : 0xffffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f463ac0b750
Sg_File_Info* p_endOfConstruct : 0x7f463ac0b7a8
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
unsigned int p_decl_attributes : 0
std::string p_linkage :
SgDeclarationModifier p_declarationModifier : <too long>: <too long>: SgDeclarationModifier(isUnknown() = false isDefault() = true isFrien
bool p_nameOnly : 0
bool p_forward : 0
bool p_externBrace : 0
bool p_skipElaborateType : 0
SgDeclarationStatement* p_definingDeclaration : 0
SgDeclarationStatement* p_firstNondefiningDeclaration : 0x7f463b16cd00
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label :
SgInitializedNamePtrList p_args : []

pointer:0x7f463a478140
SgFunctionDefinition
/home/liao6/workspace/github/rose-ast.git/constructor.cpp 9:1
IsTransformation:0
IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode* p_parent : 0x7f463b01c9e0
bool p_isModified : 0
bool p_containsTransformation : 0
$CLASSNAME* p_freepointer : 0xffffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f463ac0b5f0
Sg_File_Info* p_endOfConstruct : 0x7f463ac0b648
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgSymbolTable* p_symbol_table : 0x7f463c12e860
SgTypeTable* p_type_table : 0x2696e88
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgBasicBlock* p_body : 0x7f463a50d128
std::map<SgNode*,int> p_scope_number_list : []

pointer:0x7f463a50d128
SgBasicBlock
/home/liao6/workspace/github/rose-ast.git/constructor.cpp 9:1
IsTransformation:0
IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode* p_parent : 0x7f463a478140
bool p_isModified : 0
bool p_containsTransformation : 0
$CLASSNAME* p_freepointer : 0xffffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f463ac0b540
Sg_File_Info* p_endOfConstruct : 0x7f463ac0b598
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
SgSymbolTable* p_symbol_table : 0x7f463c12e730
SgTypeTable* p_type_table : 0x2696e60
std::set<SgSymbol*> p_type_elaboration_list : []
std::set<SgSymbol*> p_hidden_type_list : []
std::set<SgSymbol*> p_hidden_declaration_list : []
SgStatementPtrList p_statements : [0x7f463a308530]
std::string p_asm_function_body :

pointer:0x7f463a308530
SgVariableDeclaration
/home/liao6/workspace/github/rose-ast.git/constructor.cpp 10:2
IsTransformation:0
IsOutputInCodeGeneration:0
Declaration mangled name: _variable_declaration__variable_type_class_VectorX_variable_name_foo___Fb_i_Gb___Fe___L4R__scope_

Click here to go to the parent node

SgNode* p_parent : 0x7f463a50d128
bool p_isModified : 0
bool p_containsTransformation : 0
$CLASSNAME* p_freepointer : 0xffffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f463ac0b960
Sg_File_Info* p_endOfConstruct : 0x7f463ac0b9b8
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgLabelRefExp* p_numeric_label : 0
int p_source_sequence_value : -1
unsigned int p_decl_attributes : 0
std::string p_linkage :
SgDeclarationModifier p_declarationModifier : <too long>: <too long>: SgDeclarationModifier(isUnknown() = false isDefault() = false isFrie
bool p_nameOnly : 1
bool p_forward : 0
bool p_externBrace : 0
bool p_skipElaborateType : 0
SgDeclarationStatement* p_definingDeclaration : 0
SgDeclarationStatement* p_firstNondefiningDeclaration : 0x7f463a308530
SgQualifiedNamePtrList p_qualifiedNameList : []
std::string p_binding_label :
SgDeclarationStatement* p_baseTypeDefiningDeclaration : 0
SgInitializedNamePtrList p_variables : [0x7f463acf9ac0]
bool p_variableDeclarationContainsBaseTypeDefiningDeclaration : 0
SgDeclarationStatement::template_specialization_enum p_specialization : 1
bool p_requiresGlobalNameQualificationOnType : 0
std::string p_gnu_extension_section :
std::string p_gnu_extension_alias :
unsigned short p_gnu_extension_initialization_priority : 0
SgDeclarationStatement::gnu_extension_visability_attribute_enum p_gnu_extension_visability : 0
SgVariableDeclaration::gnu_extension_declaration_attributes_enum p_gnu_extension_declaration_attribute : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0
bool p_isAssociatedWithDeclarationList : 0
bool p_isFirstDeclarationOfDeclarationList : 1
bool p_is_thread_local : 0
bool p_is_constexpr : 0

pointer:0x7f463acf9ac0
SgInitializedName
/home/liao6/workspace/github/rose-ast.git/constructor.cpp 10:2
IsTransformation:0
IsOutputInCodeGeneration:0

Click here to go to the parent node

SgNode* p_parent : 0x7f463a308530
bool p_isModified : 0
bool p_containsTransformation : 0
$CLASSNAME* p_freepointer : 0xffffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f463ac0b908
Sg_File_Info* p_endOfConstruct : 0x7f463ac0b8b0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
SgName p_name : x
std::string p_microsoft_uuid_string :
SgType* p_typeptr : 0x7f463a9d0010
SgInitializer* p_initptr : 0x7f463a075010
SgInitializedName* p_prev_decl_item : 0
bool p_is_initializer : 1
SgDeclarationStatement* p_declptr : 0x7f463a1ea4a0
SgStorageModifier* p_storageModifier : 0x32ec3c0
SgScopeStatement* p_scope : 0x7f463a50d128
SgInitializedName::preinitialization_enum p_preinitialization : 0
bool p_isCoArray : 0
SgInitializedName::asm_register_name_enum p_register_name_code : 0
SgInitializedName::excess_specifier_enum p_excess_specifier : 0
std::string p_register_name_string :
bool p_requiresGlobalNameQualificationOnType : 0
bool p_shapeDeferred : 0
bool p_initializationDeferred : 0
SgBitVector p_gnu_attribute_modifierVector : [F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F, F]
unsigned long int p_gnu_attribute_initialization_priority : 0
std::string p_gnu_attribute_named_weak_reference :
std::string p_gnu_attribute_named_alias :
std::string p_gnu_attribute_cleanup_function :
std::string p_gnu_attribute_section_name :
int p_gnu_attribute_alignment : -1
SgDeclarationModifier::gnu_declaration_visability_enum p_gnu_attribute_visability : 2
bool p_protected_declaration : 0
int p_name_qualification_length_for_type : 0
bool p_type_elaboration_required_for_type : 0
bool p_global_qualification_required_for_type : 0
bool p_hasArrayTypeWithEmptyBracketSyntax : 0
bool p_using_C11_Alignas_keyword : 0
SgNode* p_constant_or_type_argument_for_Alignas_keyword : 0
bool p_using_auto_keyword : 0
bool p_using_device_keyword : 0
bool p_is_braced_initialized : 0

pointer:0x7f463a075010
SgConstructorInitializer
NULL_FILE 0:0
IsTransformation:0
IsOutputInCodeGeneration:1
Expression type: class ::VectorX

Click here to go to the parent node

SgNode* p_parent : 0x7f463acf9ac0
bool p_isModified : 0
bool p_containsTransformation : 0
$CLASSNAME* p_freepointer : 0xffffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f463ac0b858
Sg_File_Info* p_endOfConstruct : 0x7f463ac0bc78
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f463ac0bc20
bool p_is_explicit_cast : 1
bool p_is_braced_initialized : 0
SgMemberFunctionDeclaration* p_declaration : 0x7f463a6b8010
SgExprListExp* p_args : 0x7f463a0e7010
SgType* p_expression_type : 0x7f463a9d0010
bool p_need_name : 1
bool p_need_qualifier : 0
bool p_need_parenthesis_after_name : 1
bool p_associated_class_unknown : 0
int p_name_qualification_length : 0
bool p_type_elaboration_required : 0
bool p_global_qualification_required : 0

pointer:0x7f463a0e7010
SgExprListExp
compilerGenerated 0:0
IsTransformation:0
IsOutputInCodeGeneration:1
Expression type: int

Click here to go to the parent node

SgNode* p_parent : 0x7f463a075010
bool p_isModified : 0
bool p_containsTransformation : 0
$CLASSNAME* p_freepointer : 0xffffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f463ac0ba68
Sg_File_Info* p_endOfConstruct : 0x7f463ac0bac0
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f463ac0b800
SgExpressionPtrList p_expressions : [0x7f463a0b4010]

Click here to go to the parent node

SgNode* p_parent : 0x7f463a0e7010
bool p_isModified : 0
bool p_containsTransformation : 0
$CLASSNAME* p_freepointer : 0xffffffffffffffff
Sg_File_Info* p_startOfConstruct : 0x7f463ac0bb18
Sg_File_Info* p_endOfConstruct : 0x7f463ac0ba10
AttachedPreprocessingInfoType* p_attachedPreprocessingInfoPtr : 0
AstAttributeMechanism* p_attributeMechanism : 0
bool p_containsTransformationToSurroundingWhitespace : 0
bool p_need_paren : 0
bool p_lvalue : 0
bool p_global_qualified_name : 0
Sg_File_Info* p_operatorPosition : 0x7f463ac0bbc8
SgExpression* p_originalExpressionTree : 0
double p_value : 0.5
std::string p_valueString : 0.5