

# **Idris**

## **A Programming Language with Dependent Types**

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# What is Idris?

*"Idris is a general purpose pure functional programming language with dependent types."*

*The Idris Website*

- **Version 0.1.3** of Idris was released in December of 2009.
- **Version 1.2.0** is the latest stable release and was released on January 9, 2018.
- Idris was named after the singing dragon in the 1970s UK children's television program *Ivor the Engine*.

# Goals of Idris

# Properties of Idris

# Idris Features

# Idris Syntax

# What Makes Idris Unique?

# What is a Dependent Type?



# Using Idris as a Proof Assistant

# Quotes From Our Exploration

*"The concept of a programming language in which the possibility of inline assembly is an entirely foreign concept hurts my brain."*

*"Where do I put it? Do I put it in the type?"*

*"When your Rust program compiles, you know it won't seg-fault, or give you any undefined behavior at runtime. When your Idris program compiles, you throw away your executable, and publish your dissertation."*

# Questions?