

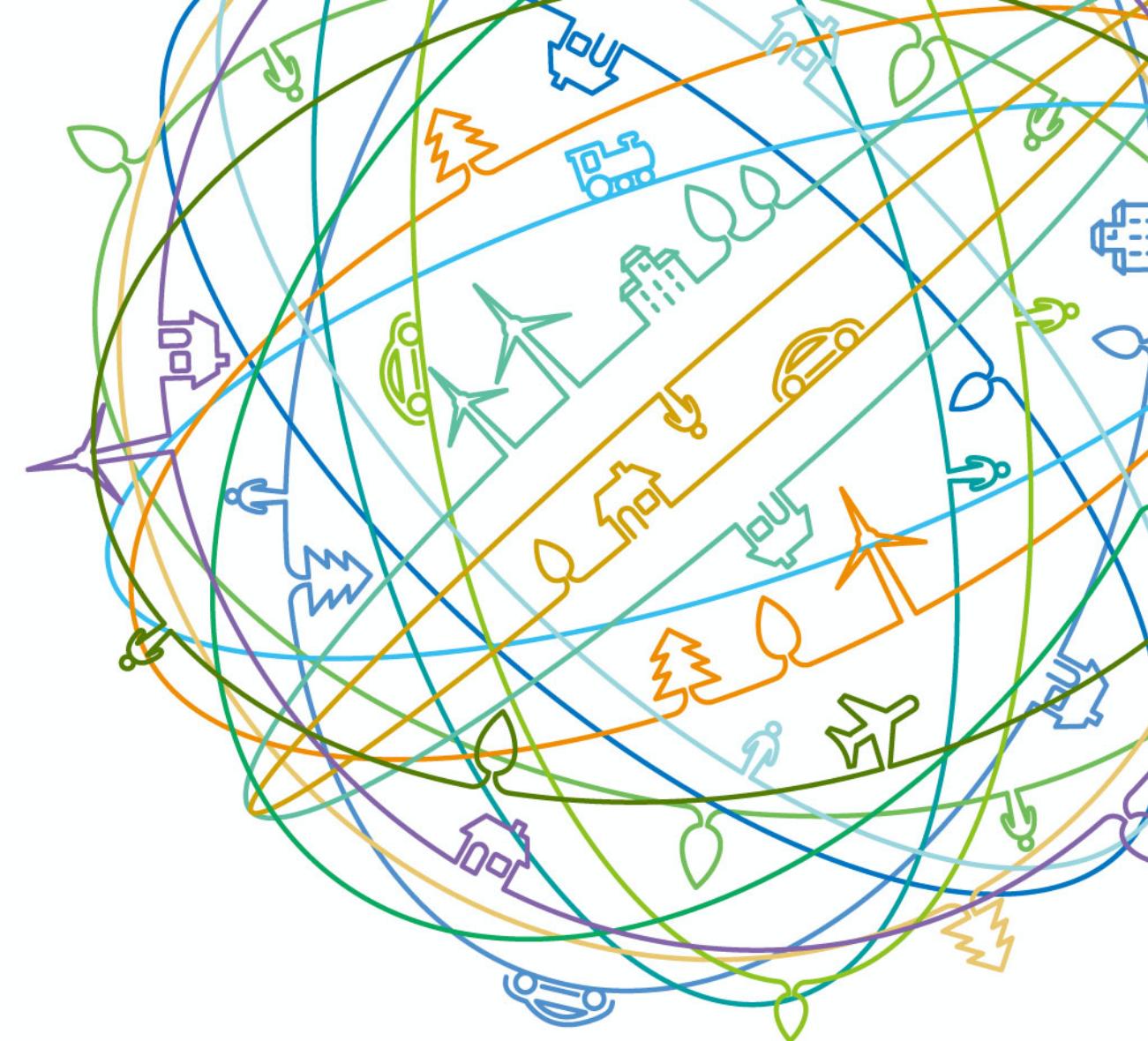
[M]<sup>s</sup>

# 自动微分



ZOMI 酱

Building a better connected world



[www.mindspore.cn](http://www.mindspore.cn)

# 关于本课程

## 1. 课程背景

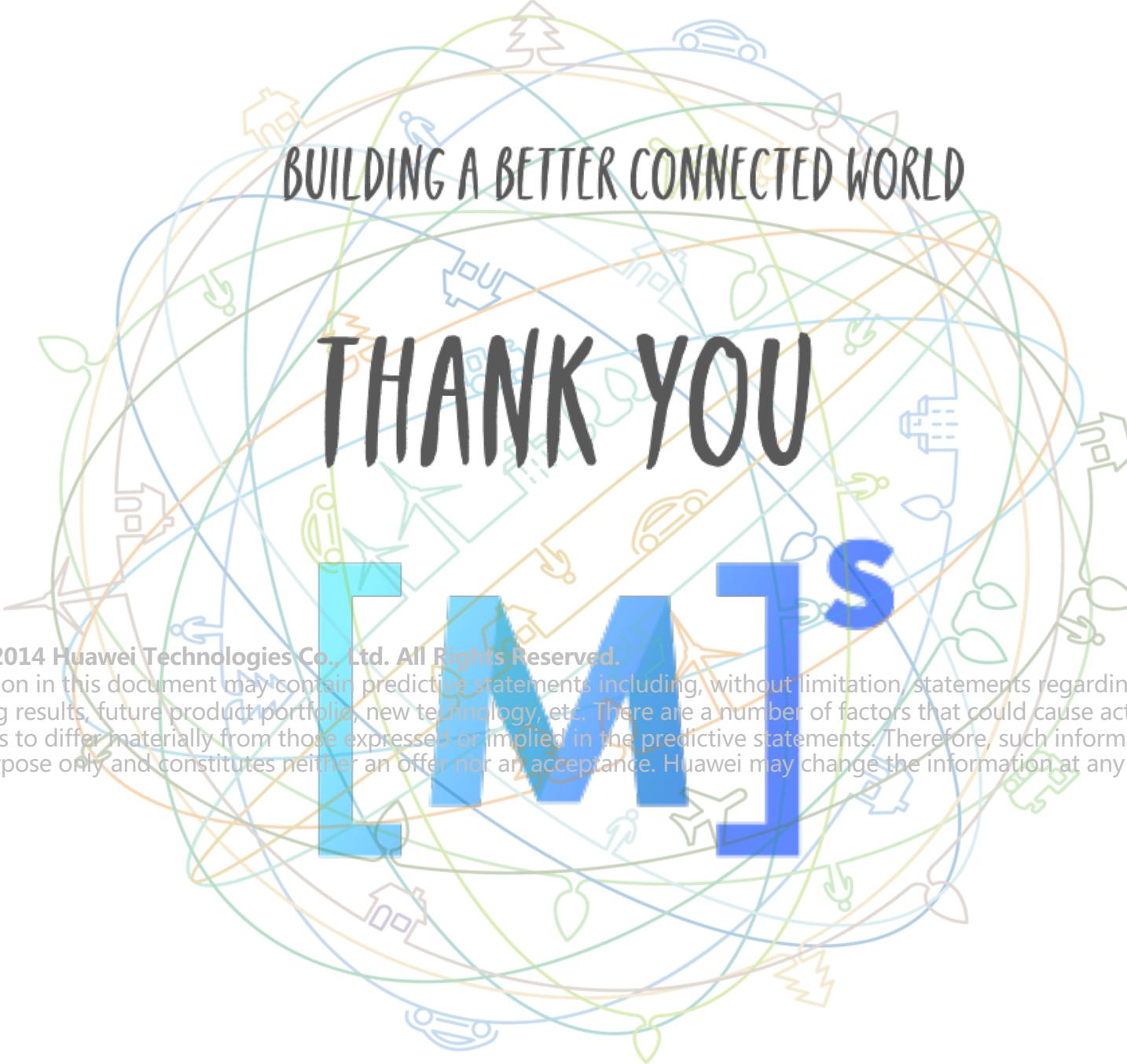
- AI框架中自动微分的重要性

## 2. 课程内容

- 微分基本概念：数值微分 - 符号微分 - 自动微分
- 自动微分模式：前向微分 – 后向微分 – 雅克比原理
- 具体实现方式：表达式或图 – 操作符重载OO – 源码转换 AST
- 手把手实现：基于表达式的前向自动微分
- 手把手实现：基于OO的反向自动微分
- 自动微分的未来挑战

## 学完本课程后，您将能够：

1. 了解到AI框架实现中最重要的自动微分原理
2. 知道全场景AI框架MindSpore的具体实现方式
3. 自动微分的技术未来发展动向与面临的挑战



BUILDING A BETTER CONNECTED WORLD

THANK YOU

TEAM

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