Practical Units Checking of Large Programs

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*Abstract*— Units checking

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# Introduction

### Problem with current units checking systems

### Introduction of our approach

### Summary of the results

### Outline of the contents

# Background

## Interpreted formalism

### Interpretation

### Interpreted formalism

### Real-world type system

### Synthesis framework

## Units Checking Fundamental

# Approach

## Interpretation + Synthesis

## Application Procedure

# Case Studoes

## Flight Planner Project

### Setup

### Units Checking results

### Sample Errors

## OpenMap

### Setup

### Units Checking results

### Sample Errors

# Obervations

## Comparsion with other approaches

# Related Work

# Conclusion

##### References

1. L. Jiang, and Z. Su. “Osprey: a practical type system for validating dimensional unit correctness of C programs,” in Proceedings of the 28th international conference on Software engineering (ICSE '06). ACM, New York, NY, USA, 2006, pp. 262-271.