# Dependence Breaking Auto-Vectorization in the Polyhedral Compiler Framework\*

Extended Abstract<sup>†</sup>

Huihui Zhang Qualcomm Innovation Center San Diego, California huihuizo@quicinc.com Zino Benaissa Qualcomm Innovation Center San Diego, California zinob@quicinc.com

#### **ABSTRACT**

abstract...

#### **CCS CONCEPTS**

• Computer systems organization → Embedded systems; *Redundancy*; Robotics; • Networks → Network reliability;

#### **KEYWORDS**

Compiler Optimization, Data Dependence, Auto-Vectorization

#### **ACM Reference Format:**

Huihui Zhang and Zino Benaissa. 1997. Dependence Breaking Auto-Vectorization in the Polyhedral Compiler Framework: Extended Abstract. In *Proceedings of ACM Woodstock conference (WOODSTOCK'97)*, Jennifer B. Sartor, Theo D'Hondt, and Wolfgang De Meuter (Eds.). ACM, New York, NY, USA, Article 4, 1 page. https://doi.org/10.475/123\_4

- 1 INTRODUCTION
- 2 RECURRENCE AND POLYHEDRAL
- 2.1 Detection and Modeling
- 2.2 Data Dependences
- 2.3 Vectorization and Parallelization
- 3 SCHEDULING
- 4 COMPOSIBILITY
- 5 CODE GENERATION
- 6 PERFORMANCE EVALUATION
- 6.1 Case Study: Viterbi
- 6.2 Case Study: ...
- 7 RELATED WORK
- 8 CONCLUSIONS

### **ACKNOWLEDGMENTS**

The authors would like to thank for... method.

The authors would also like to thank the anonymous referees for their valuable comments and helpful suggestions. The work is supported by ...

## **REFERENCES**

Permission to make digital or hard copies of part or all of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for third-party components of this work must be honored. For all other uses, contact the owner/author(s). WOODSTOCK'97, July 1997, El Paso, Texas USA

© 2016 Copyright held by the owner/author(s).

ACM ISBN 123-4567-24-567/08/06...\$15.00

https://doi.org/10.475/123\_4

<sup>\*</sup>Produces the permission block, and copyright information

 $<sup>^{\</sup>dagger}\text{The full version of the author's guide is available as acmart.pdf document}$