Schema-Guided Generation of Correctly Reusable Programs

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Outline

1 Introduction

– Classical Approaches to Program Generation

– Classical Approach to Program Schemas

2 Our Definition of Correct Schemas

3 Schema-Guided Program Generation

– Program Generation Through Specification Reduction

– Program Generation Through Pre-Computation

4 Automation Issues

5 Future Directions

– Generalisation: Schema-Guided Program Transformation

– Component-Based Software Development

6 Conclusion

References