

# Contents

<b>1</b>	<b>Introduction</b>	<b>6</b>
<b>2</b>	<b>Selective BVH Updates</b>	<b>7</b>
2.1	Algorithm Overview . . . . .	7
2.2	Cost Model . . . . .	8
2.3	Updating Nodes . . . . .	9
2.4	Selecting Nodes For Update . . . . .	13
2.5	Terminating the Optimization . . . . .	14
2.6	BVH Compaction . . . . .	15
<b>3</b>	<b>Results</b>	<b>15</b>
3.1	BVH Cost Reduction . . . . .	16
3.2	Ray Tracing Performance . . . . .	18
<b>4</b>	<b>Conclusion and Future Work</b>	<b>19</b>
<b>5</b>	<b>Ing. Jiří Bittner, Ph.D.</b>	<b>21</b>