Symbolic Execution of Apache Spark Programs

Omar A. Erminy Ugueto February 8, 2017

Fachbereich Informatik



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Abstract

Informationen zu Inhalten der Zusammenfassung entnehmen Sie bitte Kapitel 6.1 des Skripts zur Veranstaltung Wissenschaftliches Arbeiten und Schreiben für Maschinenbau-Studierende.

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

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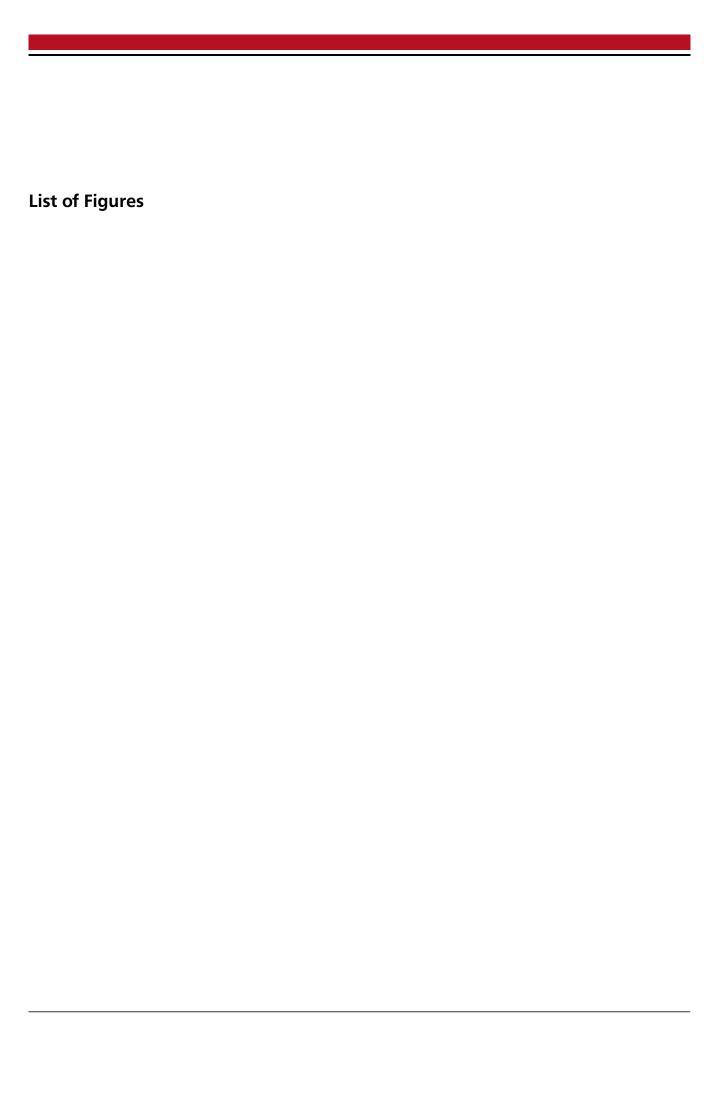
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I

Contents

1	Decl	Declaration of Academic Integrity									Ш				
Α	Anh	ang													VII
	A.1	Ein Anhang									 	 		 	VII
		A.1.1 Teil eines	Anhangs								 	 		 	VII
		A.1.2 Noch ein	Teil eines Anh	angs							 	 		 	VII
	A.2	Noch ein Anhan	g								 	 		 	VII
		A.2.1 Teil des v	veiteren Anhan	ıgs							 	 		 	VIII
		A.2.2 Noch ein	Teil des weiter	en Anha	ngs						 	 		 	VIII

1 Declaration of Academic Integrity					
I herewith formally declare support except for the quo separately listed all of the academic work, either lite the same or similar form.	to § 22 paragraph 7 of APB TU Darmstadt nat I have written the submitted thesis independently. I did not use any outside d literature and other sources mentioned in the paper. I clearly marked and terature and all of the other sources which I employed when producing this lly or in content. This thesis has not been handed in or published before in written copies and the electronic version are identical in content.				
Date:	Signature:				





List of Tables VI

A Anhang

A.1 Ein Anhang

Hier gibt es etwas zu sagen oder auch nicht.

A.1.1 Teil eines Anhangs

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

A.1.2 Noch ein Teil eines Anhangs

- First item in a list
- Second item in a list
- Third item in a list
- Fourth item in a list
- Fifth item in a list

A.2 Noch ein Anhang

Hier gibt es etwas zu sagen oder auch nicht.

A.2.1 Teil des weiteren Anhangs

- 1. First item in a list
- 2. Second item in a list
- 3. Third item in a list
- 4. Fourth item in a list
- 5. Fifth item in a list

A.2.2 Noch ein Teil des weiteren Anhangs

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$$\bar{x} = \frac{1}{n} \cdot \sum_{i=1}^{i=n} x_i = \frac{x_1 + x_2 + \dots + x_n}{n}$$
(A.1)

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$$\int_0^\infty e^{-ax^2} dx = \frac{1}{2} \sqrt{\int_{-\infty}^\infty e^{-ax^2}} dx \cdot \int_{-\infty}^\infty e^{-ay^2} dy = \frac{1}{2} \sqrt{\frac{\pi}{\alpha}}$$
 (A.2)

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A Anhang VIII

language. There is no need for special content, but the length of words should match the language.

$$\sum_{k=0}^{\infty} a_0 g^k = \lim_{n \to \infty} \sum_{k=0}^n a_0 q^k = \lim_{n \to \infty} a_0 \frac{1 - q^{n+1}}{1 - q} = \frac{a_0}{1 - q}$$
(A.3)

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$$x_{1,2} = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} = \frac{-p \pm \sqrt{p^2 - 4q}}{2}$$
(A.4)

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$$\frac{\partial^2 \Phi}{\partial x^2} + \frac{\partial^2 \Phi}{\partial y^2} + \frac{\partial^2 \Phi}{\partial z^2} = \frac{1}{c^2} \frac{\partial^2 \Phi}{\partial t^2}$$
(A.5)

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

A Anhang IX