

On Learning Meaningful Assert Statements for Unit Test Cases

Seminar: Machine Learning for Programming

Marvin Dostal

Student at the University of Stuttgart

2020-11-22

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Outline

1. Outline

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└ Outline

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1. Introduction
2. Approach
3. Evaluation
4. Discussion
5. Conclusion

Outline

1. Outline

Outline

1. Outline

1.1 C-Style

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On Learning Meaningful Assert Statements for Unit
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└─ Outline

└─ Outline

Gliederung

Outline

1. Outline
1.1 C-Style

Outline: C-Style

Cast to dvoidP-Pointer

```
1 // random comment
2 YT_1300F millenium_falcon;
3 Constitution uss_enterprise;
4
5 void *arr[2];
6 arr[0] = (void*) &millenium_falcon;
7 arr[1] = (void*) &uss_enterprise;
```

- Typ deleted by cast

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└ Outline

└ C-Style

└ Outline: C-Style

- Einfachste Art der Typenlöschung...
- Kombinationsmöglichkeiten schon sichtbar!

Outline: C-Style

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- ▶ Possible combinations recognizeable thanks to **Type Erasure**
 - ▶ Two (completely) independent objects are able to be included in one array.

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- └ Outline
 - └ C-Style
 - └ Outline: C-Style

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- ▶ $a = b + 1$
- ▶ $a\beta = \sum_i i$
- ▶ $\forall x \in \mathbb{N} \cos(x) = -\sin(x)$

Little bit of math

- ▶ $a = b + 1$
- ▶ $a\beta = \sum_i i$
- ▶ $\forall x \in \mathbb{N} \cos(x) = -\sin(x)$

Some italics

- ▶ Here is *italic*.
- ▶ *More italics!*

Something bold

- ▶ Here is **bold**.
- ▶ **More bold!**

Some bold italic mono

- ▶ Here is ***mono bold-italic***.

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- Outline
 - C-Style

Test Ligature

- fly Kafka
- fly *Kafka*

Test Ligature

- ▶ fly Kafka
- ▶ *fly Kafka*