

185.307: PL Seminar – Symbolic Execution

Symbolic
Execution

Organization

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Symbolic Execution

Executes programs in absence of concrete input data

- ▶ i.e. all data is **symbolic**
- ▶ precise, path-wise analysis

Applications

- ▶ testing, bug-hunting, verification

History

- ▶ 1976: *Symbolic Execution and Program Testing*
- ▶ 1977: *Symbolic Testing and the DISSECT Symbolic Evaluation System*
- ▶ 2000: *Bandera: A Source-level Interface for Model Checking Java Programs*
- ...
- ▶ 2012: *TRACER: A Symbolic Execution Tool for Verification*

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Where?

- ▶ Library E185/1, Argentinierstraße 8, 4th floor

When?

- ▶ **26.03.2013:** announcement of topics
- ▶ 09.04.2013: selection of topics
- ▶ 04.06.2013 (11.06.2013): presentations & discussions I (II)