

# Crystal Balls

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# 7 Crystal Balls

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# Me & Predictive Modeling?

- ▶ **Evaluating Defect Prediction Approaches: A Benchmark and an Extensive Comparison.**

*Marco D'Ambros, Michele Lanza, Romain Robbes.* In Journal of Empirical Software Engineering (EMSE), Vol. 17, No. 4-5, pp. 531-577. Springer, 2012

- ▶ **An Extensive Comparison of Bug Prediction Approaches.** *Marco D'Ambros, Michele Lanza, Romain Robbes.* In Proceedings of MSR 2010 (7th IEEE Working Conference on Mining Software Repositories), pp. 31 - 40. IEEE CS Press, 2010.

# predict

|pri'dikt|

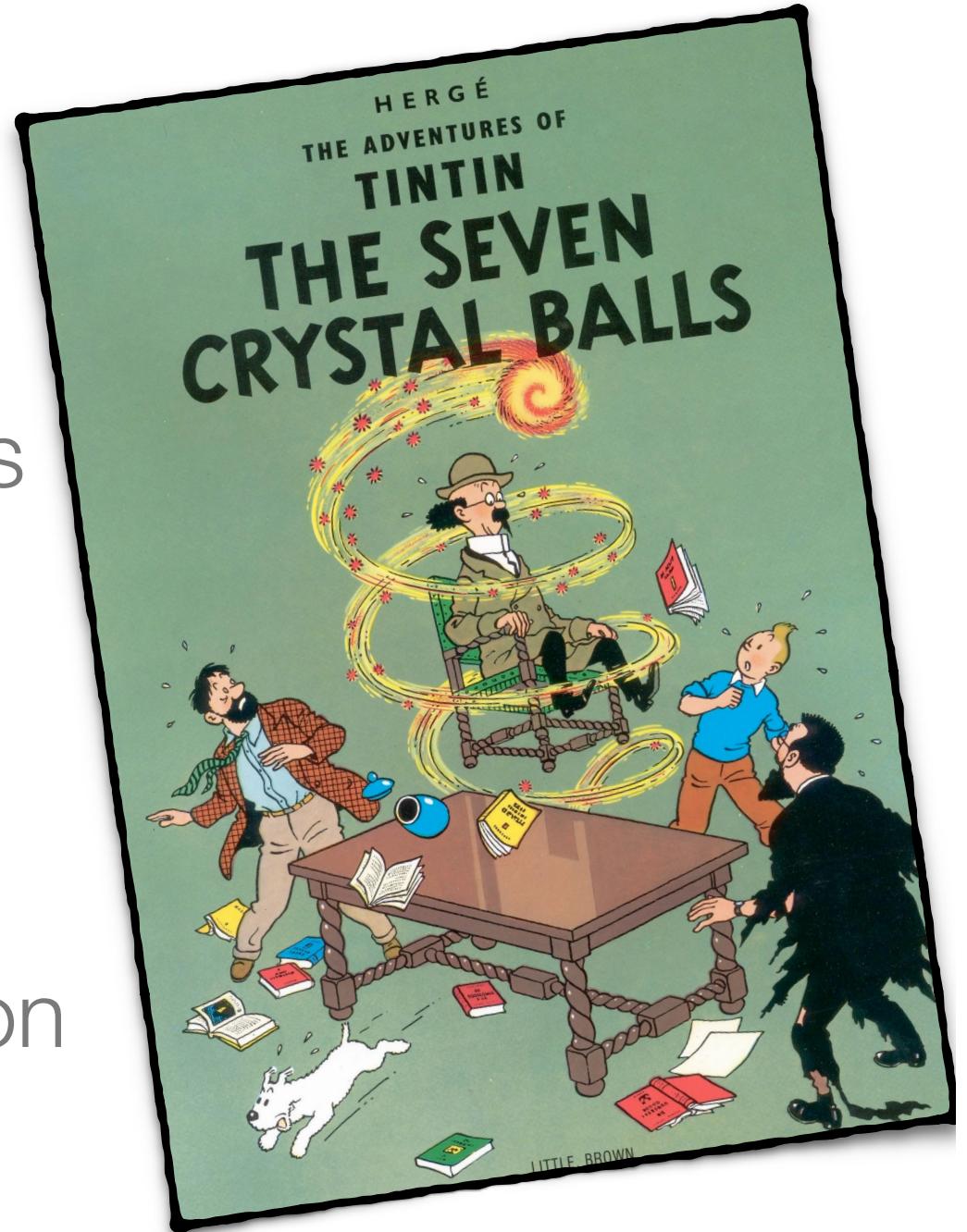
*Say or estimate that (a specified thing) will happen in the future or will be a consequence of something*

guess, second-guess, venture,  
anticipate, pretend, hazard, read,  
call, promise, augur, prognosticate,  
wager, prophesy, bet, calculate,  
indicate, omen, prefigure,  
auspicate, bode, signal, point,  
foreshadow, foretell, prognosticate,  
forecast, presage, threaten

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auspicate, bode, signal, **point**,  
foreshadow, **foretell**, prognosticate,  
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# Me & Predictive Modeling!

- ▶ Defect Prediction
- ▶ Code Completion
- ▶ Recommender Systems
- ▶ Change Prediction
- ▶ Conflict Preemption
- ▶ Software Analytics
- ▶ Program Comprehension





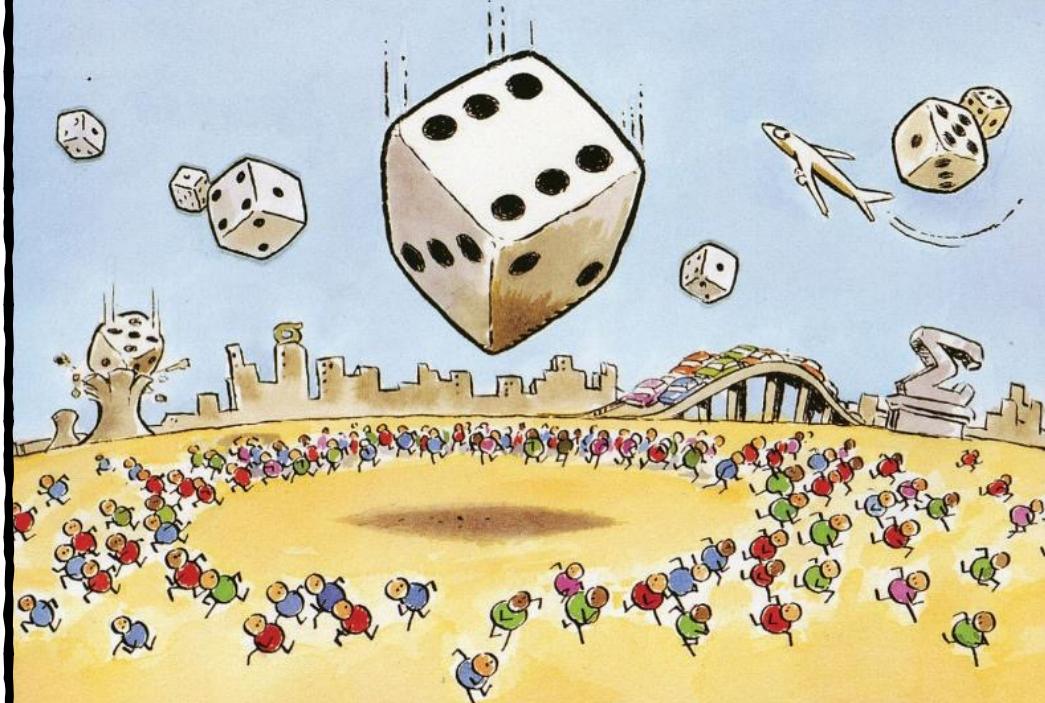
*Prof. Dr. Alberto Bacchelli | Dr. Marco D'Ambros | Tommaso Dal Sasso*

*Dr. Lile Hattori | Prof. Dr. Mircea Lungu | Roberto Minelli*

*Dr. Andrea Mocci | Dr. Fernando Olivero | Luca Ponzanelli*

*Prof. Dr. Romain Robbes | Dr. Richard Wettel*

# THE CARTOON GUIDE TO **STATISTICS**



**LARRY GONICK**  
New York Times Bestselling Author and Creator of the Cartoon History Series  
**& WOOLLCOTT SMITH**

THIS IS A CARTOON

# Simple is Beautiful



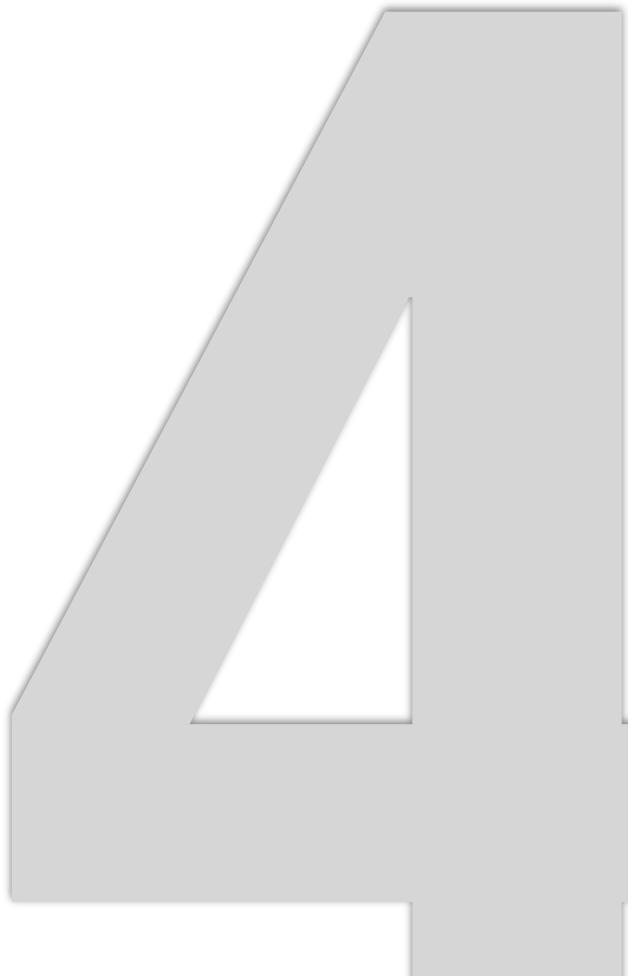
# Evaluation & Benchmarks



# Data Quantity



# Data Quality



# Unstructured Data



# Modeling



# Actionable?



7

# Prompter

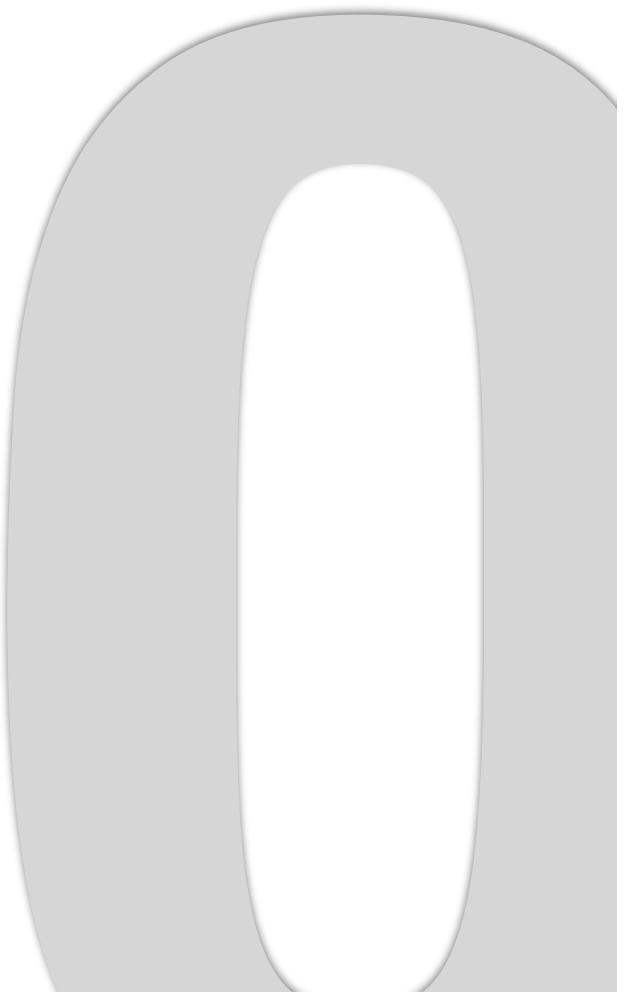
[prompter.inf.usi.ch](http://prompter.inf.usi.ch)

The screenshot shows a Java development environment with the following interface elements:

- Toolbar:** Standard icons for file operations, navigation, and search.
- Quick Access Bar:** A search bar labeled "Quick Access" with a magnifying glass icon.
- EchoServer.java Editor:** The main code editor window containing the following Java code:

```
1
2
3
4 public class EchoServer {
5
6
7    public static void main(final String[] args) {
8
9
10}
11
12}
```
- Project Explorer:** Shows the project structure: "EchoServer" > "src" > "(default package)" > "EchoServer".
- Notification Center:** An empty window titled "Notification Center" with a "Sensitivity" slider set to a medium level.
- Right Sidebar:** A vertical toolbar with various icons for navigation, search, and other tools.

# Wait a second...



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