Algorithmic Adventures and More

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`www.win.tue.nl/~wstomv`
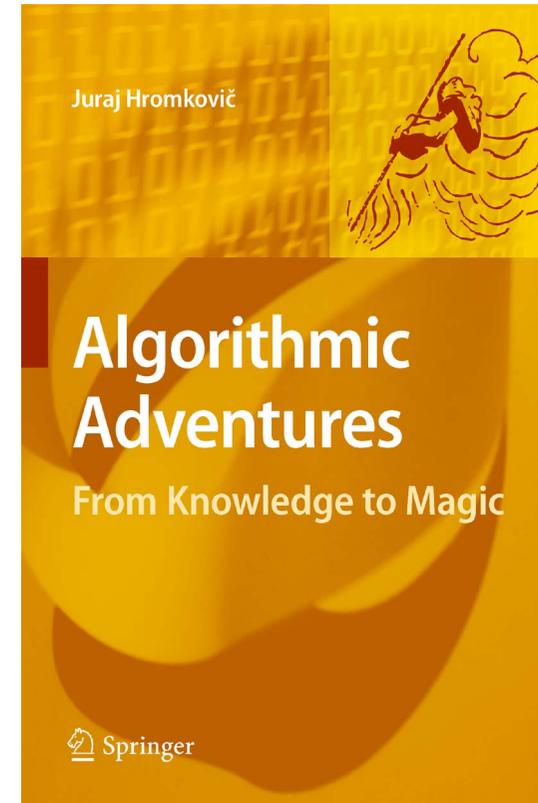
Three Contributions to Share

1. Slides for the book *Algorithmic Adventures*

2. Programming education support system peach^3

3. Tom's JavaScript Machine

Slides for Algorithmic Adventures

I taught a class from
the wonderful book
(and an ISSEP 2010 present):

Algorithmic Adventures
by Juraj Hromkovič
Springer Verlag, 2009
`www.springerlink.com`

Slides for download at:
`www.win.tue.nl/˜wstomv/edu/hci`

peach^3

- Open-source web-based client-server system: `peach3.nl`

- Various user categories: student, grader, teacher, admin, observer

- Collect, store, evaluate submitted work, feedback, and results

- Enforce deadlines, fraud detection

- Supports multiple courses, with groups, over multiple years

- Evaluation configurable per assignment

- Supports multiple (programming) languages

What peach^3 Is (Not)

peach^3 is not intended as a full-blown generic

- student administration system

- course management system (cf. Moodle.org)

- web content management system (WCMS)

- workflow management system

- program development environment (IDE)

- version management system (cf. Subversion)

... but it has a bit of everything

Low-threshold Facility for Introduction to Programming

- Tom's JavaScript Machine:

  `www.win.tue.nl/~wstomv/edu/javascript`

- Zero install: runs in any (modern) browser

- Easy to make teaching material with embedded programs/output

- Adaptable: turtle graphics, event-driven GUI, web apps (DOM)

- Includes a nice challenge with 40+ hints

Links

`www.win.tue.nl/~wstomv`

`www.win.tue.nl/~wstomv/edu/hci` (look under Downloads)

`peach3.nl`
`demo.peach3.nl`

`www.win.tue.nl/~wstomv/edu/javascript`