



Forth Bildung

a Forth Group

- needs 'fresh' blood from time to time
 - new ideas
 - new topics to discuss
 - keep the spirit alive

the time is right

- after years of JAVA and C monoculture
 - developers are looking for new programming language ideas
 - functional
 - scripting
 - “weird” new concepts
 - Forth marketing is needed

LinuxTag

- we started in 2003 to attend LinuxTag
 - largest OpenSource conference in Europe
 - commercial and non-commercial
 - free booth for open-source projects
 - Forth has a long “open-source” history

LinuxTag

- presenting a programming language is not easy
 - not much to show to catch attention
- but in the Forth community, we tinker with hardware
 - so we build "eye/ear" catcher

Triceps Robot



Triceps Robot



Triceps Robot

Movie

Triceps Robot



Tingle-Tangle



Tingle-Tangle



Balance Robot



Balance Robot



Balance Robot

The screenshot displays a Windows desktop environment with the following windows and content:

- bigFORTH Dialog** (top left): A window with a menu bar (File, Colors, Games, Fonts, Help) and a text area containing the text "ok".
- bigFORTH Dialog** (middle left): A window with a menu bar (File, Colors, Games, Fonts, Help) and a text area containing a list of timing data:

```
12 0 30 2 0,099999 sec
12 0 30 2 0,097726 sec
14 0 29 2 0,101388 sec
12 0 30 2 0,098109 sec
13 0 30 2 0,204988 sec
13 0 30 2 0,054657 sec
14 0 31 1 0,083464 sec
12 0 30 2 0,057312 sec
12 0 30 2 0,100905 sec
```
- test** (top right): A window showing a black image with a single white dot in the center.
- Balance-Regler** (middle right): A window displaying a control interface with five vertical sliders. The values for the sliders are 78, 590, 0, 126, and 827.
- iowarrior.fb** (bottom left): A window with a menu bar (File, Edit, Screen, Line, Char, Cursor, Window) and a text area containing the following code:

```
15jan06py
\
cr IowKitVersion $ff 2dup 0 scan nip - type
wh [IF] IowKitCloseDevice 0 to wh [THEN]

IowKitOpenDevice to wh cr .( iowarrior-handle: ) wh .
wh 0= [IF] kein-iowarrior-vorhanden [THEN]

wh IowKitGetNumDevs cr .( Anzahl iowarriors: ) dup .
1 <> [IF] zur-Zeit nur-ein-iowarrior-moeglich [THEN]

wh IowKitGetProductId dup cr .( ProduktId: ) .hex
$1500 <> [IF] not_iowarrior40 [THEN]

wh IowKitGetRevision cr .( Revision: ) .hex
```
- Histogramm** (bottom right): A window showing a histogram plot with a vertical green line at approximately 93. The x-axis is labeled with 1 and 93, and the y-axis has a value of 385.

The taskbar at the bottom shows the following open applications: friedel@sta..., bigFORTH D..., test, Balance-Re..., Histogramm, bigFORTH D..., and iowarrior.fb ...

Forth Driven Model Truck



Forth Workshop Training



Arduino Workshop

- our new training for 2011
 - bought a “class set” (20) Arduino boards
 - pre-installed amForth
 - 3–4 hour workshop on OpenSource conferences

Arduino Workshop

- title: *Break the "edit – compile – download cycle"*
 - we first show the standard Arduino IDE GUI (bulky Java)
 - and then we use amForth
- participants can take their Arduino with amForth home (20 Euro/pc) after the workshop

Arduino Workshop

- tour dates 2011
 - Chemnitzer LinuxTage
 - FOSDEM
 - Forth Tagung (FIG annual meeting)
 - LinuxTag Berlin
 - FrOsCon
 - OpenRheinRuhr
 - Open Hardware (OpenMoko/Wikireader conf)
 - 28C3 (Chaos Communication Congress)
 - ...

live long and prosper

Thank you

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