

Sandhi

Manoj Gudi

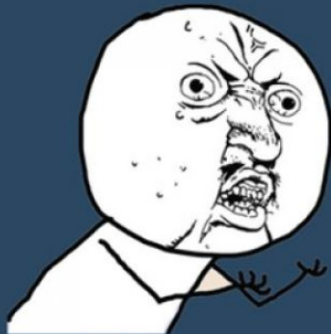
R.A. FOSSEE — NME-ICT — IIT Bombay

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Pre-Sandhi

- ▶ LabVIEW: A proprietary visual programming software by NI
- ▶ Vendor lockdown
- ▶ Buy NI DAC cards .. Buy LabVIEW = **Evil Maxx**
- ▶ Little care for support on Free Operating Systems: GNU/Linux.
- ▶ Main target: Virtual Labs, IIT Bombay.

VIRTUAL LABS



WHY U NO USE FOSS

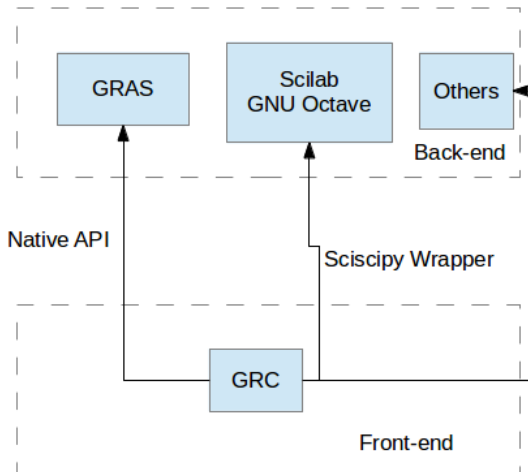
imgflip.com

Objectives



- ▶ Free and Open source
- ▶ Easy to use — Clean interface — Drag & Drop
- ▶ Should run on GNU/Linux smoothly
- ▶ Able to carry out control system experiments
- ▶ Framework should support **feedbacks**

Architecture



Features

- ▶ Light-weight ~20mb without dependencies
- ▶ Good Hardware driver support
- ▶ Language support for Development: Scilab, GNU/Octave, Python, C++
- ▶ Developed for Control system application
- ▶ But can be easily extended for
 - ▶ Image Processing
 - ▶ Neural Networks
 - ▶ And any other areas which can be represented as data-flowgraph

References/Links

- ▶ Source code
<https://github.com/gnu-sandhi/sandhi.git>
- ▶ Documentation
<https://github.com/gnu-sandhi/docs.git>
- ▶ Problems using it? Found a bug?
 - ▶ Are you sure its a bug and **not** a *feature*?
 - ▶ Raise a issue on our github
 - ▶ Mailing List: gnu_lc@googlegroups.com