

MicroFlo

Flow-based programming for microcontrollers*

*like the Arduino

Perspectives

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Software Engineer

Hobbyist

Consumer

Arduino +

- + USB prog.
- + Cross-platform IDE
- + Examples, Libraries
- + Firmata

Arduino -

- C++, textual only
- Automated testing
- **Composability**
- LGPL

MicroFlo

FBP runtime

Plain C++ inside

Integrates with NoFlo UI

0.3: Next milestone

Subgraphs

External libraries

EEPROM persistence

AVR8 backend

1.0: Vision

Full set of recomposable examples

Online interactive simulator

Automated BDD tests

?

Device Freedom

Software-defined electronics

IDE included

Explorability, learnability

Safety

Hetrogenous Programming

Systems of different sub-systems

Interactive multimedia art

Internet of Things

The Digital Divide

Tech. ever more pervasive

Technology encodes, enforces, assumes

Power asymmetry

physical property → intellectual property

digital creators vs digital consumers

Live programming?

Without a PC

Exploit code spatiality

Haptic or auditory feedback

Physical: pen & paper

More...

<http://github.com/jonnor/microflo>

<http://noflojs.org>