

Programming: SVE2, Graphical Interface, Guile, Python and More

By *Roy Schestowitz*

Created 25/05/2019 - 4:40am

Submitted by Roy Schestowitz on Saturday 25th of May 2019 04:40:42 AM Filed under [Development](#) [1]

- [Arm SVE2 Support Aligning For GCC 10, LLVM Clang 9.0](#) [2]

Given the significant performance benefits to Arm's Scalable Vector Extension 2 (SVE2), they are working on ensuring the open-source Linux compiler toolchains support these new CPU instructions ahead of SoCs shipping that support this big addition.

Arm announced Scalable Vector Extension 2 (SVE2) recently as their latest advancement around SIMD programming and increasing data-level parallelism in programs. SVE2 is designed to ultimately deliver better SIMD performance than their long-available Neon extensions and to scale the performance with vector length increases as well as enabling auto-vectorization techniques. More details in this post on SVE2.

- [Intake: Discovering and Exploring Data in a Graphical Interface](#) [3]

Do you have data that you'd like people to be able to explore on their own? Are you always passing around snippets of code to load specific data files? These are problems that people encounter all the time when working in groups and using the same datasources or when trying to distribute data to the public. Some users are comfortable interacting with data entirely programatically, but often it is helpful to use a GUI (Graphical User Interface) instead. With that in mind we have reimplemented the Intake GUI so that in addition to working in a jupyter notebook, it can be served as a web application next to your data, or at any endpoint.

- [lightening run-time code generation](#) [4]

The upcoming Guile 3 release will have just-in-time native code generation. Finally, amirite? There's lots that I'd like to share about that and I need to start somewhere, so this article is about one piece of it: Lightning, a library to generate machine code.

- [Python Language Creator: ?Male Attitude? Is Hurting The Programming Space](#) [5]

Guido van Rossum is a famous name in the programming world. He is the creator of the Python programming language which was developed back in 1989. It is only since the last few years when this general-purpose programming language started gaining popularity.

The number of Python users has increased significantly and it was not only named as the best programming language by IEEE but also the most asked-about language on Stack Overflow, overthrowing JavaScript ? the all-time winner for decades.

- [Avant-IDLE: an experiment](#) [6]

[Development](#)

Source URL: <http://www.tuxmachines.org/node/124222>

Links:

[1] <http://www.tuxmachines.org/taxonomy/term/145>

[2] https://www.phoronix.com/scan.php?page=news_item&px=Arm-SVE2-GCC10-Clang9

[3] <https://www.anaconda.com/intake-discovering-and-exploring-data-in-a-graphical-interface/>

[4] <http://wingolog.org/archives/2019/05/24/lightening-run-time-code-generation>

[5] <https://fossbytes.com/python-creator-language-male-attitude-hurting-programming/>

[6] <https://aroberge.blogspot.com/2019/05/avant-idle-experiment.html>