

Programming Leftovers

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- [Codeplay Launches Open-Source 'SYCL Academy' To Learn This Increasingly Popular Standard](#) [2]

While SYCL has been around for five years as a Khronos standard providing a single-source C++ programming model for exploiting OpenCL, it has yet to reach its prime but demand for it is picking up with Intel working to upstream their SYCL back-end in LLVM, SYCL becoming part of their programming model with oneAPI and Xe Graphics, and other vendors also jumping on the SYCL bandwagon. Codeplay has now provided an open-source SYCL learning code for those interested in this higher-level alternative to straight OpenCL programming.

- [Open-Source Build and Test Tool Bazel Reaches 1.0](#) [3]

Derived from Google's internal build tool Blaze, Bazel is a build and test tool that offers a human-readable definition language and is particularly aimed at large, multi-language, multi-repositories projects. Originally open-sourced in 2015, Bazel has now reached 1.0.

One of the major implications of reaching version 1.0 for Bazel is the promise of greater stability and backward-compatibility guarantees. This has been a historical pain point for Bazel users, who often found themselves in the situation of having to rewrite part of their build rules due to frequent breaking changes in Bazel or its ecosystem. Accordingly, the Bazel team has committed to following semantic versioning for future Bazel releases, meaning only major versions will be allowed to include breaking changes. Furthermore, the team committed to maintaining a minimum stability window of three months between major versions.

- [DevOps Deeper Dive: DevOps Accelerates Open Source Innovation Pace](#) [4]

That rate of innovation has increased dramatically in the last few years. However, much of that innovation would not have been possible if large swaths of the open source community hadn't been able to employ best DevOps practices to collaborate, said CloudBees CEO Sacha Labourey.

[...]

None of this shift has been lost on IT vendors. As the demand for proprietary code slackened, many found it profitable to offer support services for open source software. The more there is to consume, the more the support services contracts grew. Now every vendor from IBM to small IT services providers such as Fairwinds has launched open source projects that help drive demand for IT services expertise.

"There's pain around integrating a lot of disparate open source projects," said Robert Brennan, director of open source software for Fairwinds. "Organizations may be getting software for free, but there's usually not a lot of help around."

Now almost every IT vendor in the world is making software engineers available to work on open source projects. All that talent focused on open source projects has led to the development of new platforms such as Jenkins, GitHub, Kubernetes and, more recently, a raft of smaller projects. With the rise of containers and cloud-native applications, open source software projects are entering another era that will see many of those same software engineers leveraging DevOps practices more broadly to drive even more innovative projects at increasingly faster rates.



[Find your next developer from open source communities](#) [5]

Meanwhile, demand for data scientists is rising as companies seek AI-based solutions to stay competitive. Demand is reflected in salary offers. Companies competing to hire and retain data experts are offering on average more than US\$100,000, making it one of the most highly paid professions in the States.

For companies lacking the budget to hire or train in-house staff to fill the role, they may find themselves struggling with maintaining technological infrastructure or moving forward with plans for digitization.

Therefore, open source learning and further development of communities could be the solution to this gap.

An IBM grant to support open source communities such as Girls Who Code, a non-profit organization offering coding lessons for women in the US, is a step forward to filling in a shortage of software developers.

Links:

- [1] <http://www.tuxmachines.org/taxonomy/term/145>
- [2] https://www.phoronix.com/scan.php?page=news_item&px=Codeplay-SYCL-Academy
- [3] <https://www.infoq.com/news/2019/10/bazel-1-0-released/>
- [4] <https://devops.com/devops-deeper-dive-devops-accelerates-open-source-innovation-pace/>
- [5] <https://techhq.com/2019/10/find-your-next-developer-from-open-source-communities/>