A Solid Foundation for Statistics in Python with SciPy

Matt Haberland, Warren Weckesser

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Diversity Statement

As an open source project, anyone and everyone is welcome to contribute to SciPy. Accordingly, the SciPy project adopted the following diversity statement in its Code of Conduct shortly before the release of SciPy 1.0 in late 2017:

> The SciPy project welcomes and encourages participation by everyone. We are committed to being a community that everyone enjoys being part of. Although we may not always be able to accommodate each individuals preferences, we try our best to treat everyone kindly.
>
> No matter how you identify yourself or how others perceive you: we welcome you. Though no list can hope to be comprehensive, we explicitly honour diversity in: age, culture, ethnicity, genotype, gender identity or expression, language, national origin, neurotype, phenotype, political beliefs, profession, race, religion, sexual orientation, socioeconomic status, subculture and technical ability, to the extent that these do not conflict with this code of conduct.

Nevertheless, the group of SciPy contributors is not as diverse as it should be. As another step to increase the diversity of the SciPy community, part of this proposal is to collaborate with the Cal Poly Women Involved in Software & Hardware (WISH) club to host a one-day development sprint.

Before the sprint, the principal investigators will prepare English and mathematical descriptions of unit tests and benchmarks that are needed for the new and improved SciPy statistics functionality. For instance, the description of a unit test might consist of a textbook's example calculation for a statistical test that has been implemented in the course of the proposed work. We will work with WISH club leadership before the event so that the *students* are prepared to lead the actual sprint by example. After setting up their development environment, a sprint participant would perform a provided calculation using the new or improved SciPy function, compare the output of the code with the provided expected result, and make a pull request with their code to the SciPy repository.

Besides making valuable technical contributions to the proposed work, participants will be introduced to the process of contributing to an open source project. The goal is for those who enjoy the experience to continue contributing to SciPy or other open source projects long after the event is complete.