## Frank Hutter

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RE: NSF Grant Proposal "Improving Scikit-learn Usability and Automation"

I'm an Emmy Noether Research Group Lead (eq. Assistant Professor) in Computer Science at the University of Freiburg, focussing on machine learning for automated algorithm design.

If the proposal submitted by Dr. Andreas Mueller entitled "Improving Scikit-learn usability and automation" is selected for funding by NSF, it is my intent to collaborate as detailed in the Project Description.

My group develops the auto-sklearn project, an automated machine learning system based on meta-learning and Bayesian optimization for combined algorithm selection and hyperparameter optimization, which has already won several international machine learning competitions. The scikit-learn package provides the machine learning models used in the auto-sklearn project. Better support for automation in scikit-learn will make software engineering for the auto-sklearn project much easier. Better integration of our automated machine learning tools with scikit-learn will also make them much easier to use and allow more researchers and practitioners to take advantage of them. I and my group commit to collaborate closely with Dr. Mueller and his group in integrating the innovations developed in auto-sklearn more tightly into scikit-learn, and to further improve the usability and performance of auto-sklearn.

Sincerely,

(Frank Hutter)