We are looking for new team members for our AutoML group at the information processing institute of the Leibniz University Hannover. These can be either:

- PhD student
- PostDoc

A promising candidate should have the following mandatory skills:

- An excellent first academic degree in artificial intelligence, machine learning, computer science, statistics or a related discipline.
- A solid understanding and hands-on experience with machine learning and/or deep learning
- Advanced programming skills in Python
- Solid skills in scientific writing (shown by an excellent master thesis for PhD candidates, or published papers for PostDocs)
Further (optional) beneficial skills can include:

- AutoML
- Hyperparameter optimization
- Neural architecture search
- Algorithm configuration
- Algorithm selection
- Bayesian optimization
- Meta-Learning and transfer learning
- Interpretable Machine Learning
- Reinforcement learning
- Evolutionary strategies
- Hard-combinatorial problem solving (e.g., SAT or ASP)

The concrete future research topic has to be in the field of AutoML.

The salary scale for full-time positions is TV-L E13 (with a monthly gross salary between 4000 EUR and 4600 EUR, depending on experience and previous position).

Application materials comprise:

- CV
- Full set of transcripts
- Earliest, preferred and latest possible start date
- Brief statement of what drives you to pursue a PhD in the field of AutoML, and what are your goals in applying to AutoML Hannover (at most 1 page)
- At least 2 references (only for PostDocs!)
  - For each reference, please include name, title, and email address.
  - References should expect to be contacted for a reference letter.

Please submit these documents by **Feb 21st, 2020** to lindauer@tnt.uni-hannover.de. (Please note that if we should already find a promising applicant before Feb 21st, we might terminate this call earlier.)

Our group is dedicated to promoting diversity. All qualified applications will be considered without regard to race, color, religion, gender identity or expression, sexual orientation, national origin, ethnic backgrounds, disability, age or other protected features.

**Additional Information**

**Why Hannover?** Hannover is at the center of Germany. Although Hannover is one of the greenest cities in Germany, it has an (undeserved) underdog image. As the capital of Lower Saxony, you can find in Hannover everything you are looking for, incl. concerts, museums, a big zoo, and all kinds of events and shopping opportunities — *if there is no COVID-19 pandemic*. If you think this is not enough, you can take the train to go to Hamburg or Berlin within 1h and 30min.
Why the Leibniz University Hannover (LUH)? The LUH is neither one of these very young universities, nor one of these very old universities. It goes back to 1831 and these days it combines the best of both worlds by having 87 degree courses, roughly 30,000 students, being funded with more than 500 Mio Euro each year, and having more than 300 professors from all kinds of disciplines (source). Our faculty of electrical engineering and computer science combines the expertise in the most important areas for digitization. Close-by companies, such as the car manufacturer VW, also allow to transfer research insights into relevant practical solutions and make it easy to find jobs after graduation.

Why the information processing (tnt) institute at the LUH? The tnt combines the expertise from three different groups on signal and video coding, machine learning, deep learning, big data analysis, game playing, computer vision, computer-human interfaces, medical image processing and of course automated machine learning. The tnt institute consists of more than 40 researchers from 7 different nations and always aims for state-of-the-art research at an international scale by publishing at the top international conferences and journals.

Why a PhD in Germany? First of all and in contrast to many non-EU countries, paid holidays (~30 days per year), paid sick leave, paid parental leave and health insurance are included. Furthermore, in contrast to many other countries, you will receive a fairly good salary (see 100% E13), which is even competitive with the salary for a young researcher or research engineer at big tech companies in Germany. Furthermore, you will have fairly little obligations: besides doing your research, you can expect to support the group and the institute one day per week (e.g., teaching) and depending on the funding of your contract, one day for working on a specific project (which will synergize with your PhD topic). So, you can work on your own (AutoML-related) research at least 60% of your time — much more than in most other countries. If you are a PostDoc, you can even apply for your own grant money (e.g., via DFG) and start your own research group.