



The Hector Research Institute of Education Sciences and Psychology is currently inviting applications for the following position:

**A Postdoctoral Research Fellow on Educational Data Science for 3 years (+ possible 2 year extension) (m/f/d)  
(100%, E 13 TV-L<sup>1</sup>)**

**We are seeking** a bright and motivated postdoctoral research fellow who has strong background in data science (more specifically machine learning, learning analytics, and/or psychometrics), with good experience analyzing social science data (e.g., data from education). We are especially interested in analyzing a number of publicly-available large datasets on educational attainments.

**The position comes** with a fixed-term contract for 3 years with the possibility for extension for an additional 2 years. The expected start date is September 2021 but we are highly flexible and committed to accommodating candidates' individual circumstances. There is the possibility to participate in the institute's own postdoctoral academy PACE (Tübingen Postdoctoral Academy for Research on Education) which offers further training, coaching, and mentoring at postdoctoral level.

**The position is part of** the new Alexander von Humboldt Professorship of Educational Psychology held by Professor Kou Murayama, who has moved to the University of Tübingen to continue his internationally renowned research at the Hector Research Institute. A Humboldt Professorship is the most highly endowed research prize in Germany and enables world class scientists to carry out long-term and ground-breaking research at universities and research institutions in Germany (<https://www.humboldt-professur.de/en>). The Hector Research Institute is a nationally and internationally leading research center in education sciences and psychology. Our interdisciplinary team works in a well-equipped building close to the historic old town of Tübingen, Germany. Traditionally, research at the Hector Research Institute investigates determinants of successful teaching and learning processes using large scale assessments, longitudinal studies, and randomized controlled field trials. Our team will collaborate within the institute continuing these traditions and also supplement them with a diverse array of methodological approaches. More information can be found at [www.hib.uni-tuebingen.de](http://www.hib.uni-tuebingen.de).

**The successful candidate is expected** to analyze publicly-available large datasets on educational attainment using a variety of machine learning techniques, exploring critical predictors of educational outcomes in a bottom-up, comprehensive manner. The successful candidate is expected to design, implement, and perform the study in an autonomous manner, with some guidance from the PI. Teaching is not required but we strongly encourage postdocs to teach some (e.g., one course per semester) as part of our training program for postdocs.

**The successful candidate holds** an excellent PhD in one of the aforementioned fields or a related field such as psychology (or will have obtained a doctoral degree by the start date of the position) and has a visible track record (e.g., publication and third-party funding experience) in the field. Research experiences in education/psychology research are good bonus. A visible commitment to research transparency is also a plus. Most importantly, the successful candidate should specifically demonstrate (1) a solid methodological skill set that allows them to conduct research with independence and (2) substantive experience with interdisciplinary research project(s), and (3) a strong motivation and

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<sup>1</sup> According to the general pay scale of German universities, the salary will be "E 13 TV-L". Depending on your experience this corresponds to a monthly salary of around EUR 4.560,-\*\* (100% position E13, experience level 3, gross pay, before tax). After taxes as a single (i.e. not married or living with a life partner; no children), this monthly salary is at least EUR 2.642 (net salary after taxes and health insurance payments). Information regarding cost of living in Tübingen: <https://tuebingenresearchcampus.com/tuebingen/>



open-mindedness with respect to building interdisciplinary links with education sciences (if they have not worked in education sciences before). You will also be given the opportunity to join the LEAD Graduate School & Research Network ([www.lead.uni-tuebingen.de](http://www.lead.uni-tuebingen.de)) to develop a cross-faculty collaborative network of researchers working on research on education. While beneficial, proficiency in German is not necessary for these positions.

For further inquiries about the position, please reach out to Professor Murayama ([k.murayama@uni-tuebingen.de](mailto:k.murayama@uni-tuebingen.de)).

**Applications** including (1) a cover letter detailing your experiences and skills in data science using social science data (with specific analytic methods and programming language(s) that you have used), (2) a CV, (3) contact of two references who can be contacted before interview, and (4) degree and other certificates with transcripts should be sent via email **in one single pdf-file** to [verwaltung@hib.uni-tuebingen.de](mailto:verwaltung@hib.uni-tuebingen.de). Initial deadline is March 23, 2021 but we continue to seek candidates until the position is filled by a highly qualified candidate. Disabled candidates will be given preference over other equally qualified applicants. The University seeks to raise the number of women in research and teaching and therefore urges qualified women to apply for these positions. Employment will be officially organized by the central university administration.