

Open-Rank Position in Quantitative Methods and Data Science in Vanderbilt's Peabody College and Vanderbilt's Data Science Institute

Vanderbilt's [Peabody College of Education and Human Development](#) together with Vanderbilt's [Data Science Institute](#) invites applicants for an open-rank (tenure-track or tenured) faculty position with joint appointment in both the [Quantitative Methods Program](#) within Peabody College and the Data Science Institute (DSI). This search is part of a [two-position](#) hire spanning Peabody College and the DSI, and is also part of a broader multi-year faculty hiring initiative in the data sciences at Vanderbilt.

We seek candidates whose research involves developing innovative data science methods that interface with and relate to quantitative psychology in order to advance the emergent fields of behavioral data science and educational data science. Possible areas of methodological research specialization could include machine learning, data mining, computational methods for statistically modeling high-dimensional neurobiological/brain imaging data, and methods for social science genomic analyses (e.g., for genome-wide association studies with behavioral/educational implications). Applications are encouraged from individuals whose research interests span and translate between the fields of traditional quantitative psychology methods, machine learning/data mining, and/or computer science. A methodological specialization with broad application and connection to ongoing research at Peabody College is desirable as is capacity for effectively presenting complex technical content in a clear and understandable manner. Candidates should have an excellent record of research productivity, a strong commitment to inclusive teaching of a diverse population of students at the graduate and undergraduate levels, potential for securing external funding, and an earned doctorate in quantitative behavioral/social science or a related data science discipline.

We particularly welcome applicants interested in teaching courses that complement and expand the quantitative methods program offerings in Peabody College, including courses on data science methods; on statistical consulting; and on data visualization and wrangling. The candidate's tenure home will be in Peabody College and they will also be a core member of Vanderbilt's DSI, reinforcing ongoing [connections](#) between Peabody College and the DSI. As such the candidate will contribute to the research and teaching mission of the DSI, ideally fostering research collaborations with scholars from across the [five departments](#) within Peabody College as well as with other faculty working on data science-related topics. The position's responsibilities for the DSI entail teaching an annual data science methods course in either Vanderbilt's [master's program in data science](#) or Vanderbilt's newly created [undergraduate data science minor](#). DSI methods courses are taught via a computational/resampling pedagogical approach using R and/or Python. DSI teaching needs currently include a graduate team-project-driven applications of data science methods course, and an undergraduate foundations of data science methods course.

Beyond Vanderbilt's Data Science Institute and Peabody's Quantitative Methods Program, there is a wealth of additional quantitative expertise embedded in the wider Vanderbilt community for networking, collaboration, and faculty development. This includes: [Biostatistics](#), [Peabody's Educational Neuroscience Program](#), [Big Biomedical Data Science](#), [Scientific Computing](#), the [Genetics Institute](#), the [Kennedy Center Data Science Core](#), and [Computer Science](#), as well as a broad commitment to teaching excellence supported by our innovative [Center for Teaching](#). Vanderbilt University is located in [Nashville, TN](#), one of the fastest-growing and culturally rich metropolitan areas in the U.S. Peabody is one of the [top-rated](#) Colleges of Education and Human Development in

the U.S., with relatively small class sizes, a strong institutional commitment to [diversity and inclusivity in all areas](#), competitive salary, and excellent benefits.

Application materials received by September 15th, 2021 will be given full consideration. Applications should include a cover letter, curriculum vitae, at least 3 letters of recommendation, a research statement, teaching statement, a statement on commitment to equity, diversity, and inclusion, a summary of prior collaborative projects, and relevant additional supplemental material (e.g., publications, student evaluation summaries, etc.). Applications may be submitted at <https://apply.interfolio.com/88574>. Requests for information should be sent to QM/DSI search chair Sonya Sterba sonya.sterba@vanderbilt.edu. Vanderbilt University values diversity and welcomes applications from individuals with diverse backgrounds. Vanderbilt is an affirmative action/equal opportunity employer.

Vanderbilt University has made the safety of our students, faculty and staff, and our surrounding communities a top priority. As part of that commitment, the University recently announced that students, faculty, and staff, are required to be vaccinated against COVID. As a prospective and/or a new employee at Vanderbilt, you will be required to comply with the University's vaccination protocol. Effective, August 1, 2021, proof of full vaccination or an approved accommodation will be required before the start of employment in order to work at Vanderbilt University. Accommodations for medical and religious exemptions can be requested with the Equal, Opportunity and Access Office <https://www.vanderbilt.edu/eoa/>.

Applied Data Science in Education Position Announcement

Peabody College of Vanderbilt University seeks applicants for an open rank (tenured or tenure-track) position in Applied Data Science in Education. The successful applicant will have a research record that demonstrates an ability to apply the tools of data science to key problems in research on education and human development. These data science tools may include working with unstructured or high-dimensional data, computing, automation, natural language processing, machine learning, neuroimaging, and artificial intelligence. The committee seeks a diverse applicant pool and candidates from a wide variety of disciplinary backgrounds.

The committee is particularly interested in individuals who study student outcomes--such as learning, progression, and attainment--in a variety of domains including but not limited to: learning analytics, policy analysis, critical quantitative analysis, predictive analytics in education settings, or educational neuroscience (e.g. analysis of high-dimensional brain imaging data).

Candidates should possess an exemplary record of scholarly accomplishment commensurate with their rank. Applicants must have a demonstrated capacity to work collaboratively with colleagues and students from a wide range of cultural, disciplinary, and academic backgrounds. Evidence of excellent classroom instruction is required for consideration. The capacity to attract external funding is strongly preferred. Candidates should either have a Ph.D. or be expected to complete their Ph.D. by May 2022.

This position is part of a [two-position](#) hire spanning Peabody College and the DSI, and is also part of a broader multi-year faculty hiring initiative in the data sciences at Vanderbilt. Candidates will be

core members of Vanderbilt's recently established [Data Science Institute](#) (DSI) and will be expected to contribute to the research and teaching mission of the institute, ideally fostering research collaborations with existing faculty across academic departments working on data science-related topics.

The candidate will also join one of [Peabody's five departments](#) and will be expected to teach undergraduate and graduate courses in their home department as part of their appointment. The position's responsibilities for the DSI entail teaching an annual data science methods course in either Vanderbilt's [master's program in Data Science](#) or Vanderbilt's newly created [undergraduate Data Science minor](#). All DSI methods courses are taught via a computational approach using R and/or Python. Teaching needs currently include a foundations of data science methods and/or a project-driven applications of data science methods course, both of which include foci on data manipulation, visualization, dimension reduction, machine learning, shrinkage, cross-validation, and re-sampling methods.

Candidates should submit a letter of application that describes how the candidate applies data science to education research; CV; teaching statement; statement that describes how the candidate's cultural, experiential, and/or academic background contributes to their understanding of diversity and inclusion; and three letters of recommendation. Review of applications will begin September 15, 2021, and the search will continue until the position is filled. The anticipated start date is August 2022. Please apply at the following link: <https://apply.interfolio.com/88030>.

Please direct questions to the search chairs Brent Evans (b.evans@vanderbilt.edu) and Will Doyle (w.doyle@vanderbilt.edu).

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