STANFORD UNIVERSITY

COLLEGE
TRANSITION
COLLABORATIVE

College Transition Collaborative – Data Analyst

The College Transition Collaborative ("CTC") brings together pioneering social psychologists, education researchers and higher education practitioners to create learning environments that produce more equitable higher education outcomes. In collaboration with postsecondary institutions nationwide, CTC creates and evaluates inexpensive, scalable tools and strategies for colleges and universities; works with administrators to develop effective ways to adapt and deploy them in diverse settings; and rigorously evaluates the effects of these interventions on persistence and achievement, especially among first-generation and under-represented college students. We believe that all post-secondary students are capable of thriving in college and graduating with the right institutional supports. Everyone struggles sometimes in college. Our work strives to ensure that, in these moments, all students feel like they can persevere and that their school supports their success.

We are currently seeking a data analyst who can help us analyze the outcomes of multiple, ongoing large-scale randomized controlled experiments and develop data processing pipelines to automate a variety of data processing and prediction tasks. The duties include creating custom software and data collection pipelines and implementing existing third-party tools to retrieve, analyze, and process large datasets and metadata for integration into databases maintained by the projects. Duties will also include performing one-off analyses to support school partner reporting and publications. Experience in developing R scripts and advanced statistical modeling is required.

This individual will be an essential project member who must be able to learn and work independently, yet collaborate effectively with co-workers. Previous experience working in an academic environment is a plus. Knowledge of social and educational psychology is helpful but not necessary. The candidate will be expected to collaborate with scientific staff and contracted engineering support in the specification, design, and implementation of processing and analysis pipelines. The work will take place in a dynamic environment where specifications often change rapidly in response to user demand, so the candidate must be able to be flexible in his or her implementations.

Duties include:

Analyzing data

- Identify meaningful subgroups of students and evaluate treatment effects by conducting statistical analyses using a variety of techniques, including multilevel models, OLS models, structural equation models, clustering techniques, and specification curves/permutation tests
- Devise methods for identifying data patterns, trends in available information sources using a variety of qualitative and quantitative techniques. Determine and recommend additional data collection and reporting requirements
- Serve as a resource for non-routine inquiries such as requests for statistics or surveys

Reporting results

- Work under consultative or self-initiated direction to assess and produce relevant, standard, or custom information (reports, charts, graphs and tables) from structured data sources by querying data repositories and generating the associated information
- Develop R-scripts to process large amounts of data and automatically generate analyses
- Use reports and analyses to identify potentially problematic data, make corrections, and determine root causes for data problems from input or processing errors, and develop solutions.
- Work with a small team of Research Coordinators and contractors to employ new and existing tools to create reports to reporting requirements defined by the project.
- Distribute and disseminate reports to applicable agencies, researchers, management and other internal end-users.

Data management and tool development

- Create non-routine databases and their related information summary; develop algorithms and statistical model; and perform statistical analyses appropriate to complex data and reporting requirements.
- Lead the implementation of data processes, standards and methods/infrastructure for data collection, analysis, and management
- Develop CTC Research Coordinator skills to ensure ability to implement standards and methods

Qualifications

EDUCATION & EXPERIENCE (REQUIRED):

- Bachelor's degree or a combination of education and relevant experience.
- Significant experience with quantitative analyses.

KNOWLEDGE, SKILLS AND ABILITIES (REQUIRED):

- Substantial experience with the R statistical language and RMarkdown
- Substantial experience with multilevel modeling (ideally with experience doing so

in R)
- Strong writing and analytical skills.
- Strong communication skills, both verbal and written.
- Ability to prioritize workload.

KNOWLEDGE, SKILLS AND ABILITIES (DESIRED):
- A personal passion for learning and a drive to advance equality of opportunity in education.
- Experience with modern source code version control systems (git).
- Experience with Javascript
- Experience with SQL
- Experience with Python
- Bachelors Degree
- Advanced degree (M.S. or higher) in Statistics, Computer Science, or a quantitative Social Science, or equivalent experience

Location: San Francisco Bay Area preferred, other locations possible
Schedule: Full-time
Classification Level: I

To apply for this position, send your resume and cover letter ctc@collegetransitioncollaborative.org with the phrase "data analyst" in the subject line.