

EdLab at Gottesman Libraries envisions, designs, and pilots knowledge projects for a fundamentally different education sector that is attuned to the emerging post-industrial, information-based, globally-connected world. EdLab is organized in small flexible multi-disciplinary teams that collaborate to develop and deliver products and services of distinction.

The Data Scientist/Learning Applications Researcher draws on her/his prior professional experience to invent, manage, and assess a range of new functions and services as part of the overall research program designed to create a rich environment for self-directed and social learning in the library and beyond.

### **Responsibilities:**

- Design and instrument infrastructure to facilitate data collection and analysis.
- Identify quantitative markers of user experience.
- Process and analyze data and results.
- Communicate ongoing work and findings to the education research community via published papers, conference presentations, and other EdLab venues.
- Work with engineering and product teams to help define user experience goals and metrics.
- Influence design decisions by communicating findings.
- Collaborate with academia/industry to apply the results of research and develop new techniques, products or practices.

### **Qualifications:**

- An Ed.D. or Ph.D. in Education, Computer Science, Human-Computer Interaction, Statistics, Psychology, Sociology or a related field.
- 2-3 years experience in a research setting that demonstrates a range of abilities, including a significant degree of specialization within one or more domains.
- A track record demonstrating excellent command of the research questions within a given domain, and of the technical tools for the analysis of data related to those questions.
- Experience working with large-scale quantitative data sets, live experiments, or other methods that provide insight into user/learner experience.

- Excellent working knowledge of statistics and the principles of experimental design.
- Excellent verbal and written communication skills.

**Specialization in one or more of the following technical/domain areas:**

- Programming skills related to data extraction or understanding how digital products are instrumented (e.g. Python, C++, Perl, Java).
- Development of online services (e.g. HTML, CSS, JavaScript).
- Adaptive teaching and learning models.
- Creation of visual dashboards for understanding trends, experience in working with SQL databases, or other experience related to online experiments (e.g. A/B testing, live testing, context-sensitive survey techniques).
- A well-developed interest in using large-scale research techniques to understand users of digital education products and services is more important than any particular specialization.

This is a one-year appointment with possibility for renewal.

Please submit a resume and cover letter to [edlabjobs@tc.columbia.edu](mailto:edlabjobs@tc.columbia.edu) if interested.