Working Title: Research Scientist

Official Title: ASSOCIATE SCIENTIST(E10FN) OR ASSISTANT SCIENTIST(E10LN)

Degree and area of specialization:

Ph.D. in Education, Computer Science, Computational Linguistics, or related discipline(s).

Minimum number of years and type of relevant work experience:

At least 3 years of research experience in the development, implementation, and evaluation of educational technologies, ideally in educational games or related field(s). Research may include work done as part of doctoral studies, but ideally will also include post-doctoral work.

Experience writing, managing, and working on federal or other research grants.

The ideal candidate should have demonstrated proficiency in psychological theories of learning, qualitative and quantitative research methods, computational linguistics, and the design, implementation, and evaluation of technology. Any successful candidate will have expertise in several of these areas, including quantitative research methods.

Candidates must be well organized, self-motivated, and have strong interpersonal skills to help manage and contribute to a large, collaborative, inter-disciplinary research team.

Required Skills:

* Excellent oral and written communication skills.
* Wide array of learning science research skills.

* Experience with quantitative techniques to generate and analyze discourse in an educational setting.

* Strong interpersonal skills and experience working in a research group and with collaborators in other disciplines.

* Experience advising junior laboratory members on research and training activities.

* Experience with research supervision and management.

* Experience with preparation of manuscripts, grants, and research presentations.

Principal Duties

The candidate will conduct research in the Games and Professional Simulations (GAPS) research consortium. GAPS is a collection of students, faculty, and academic staff who develop games for science, technology, engineering, and mathematics (STEM) learning and assessment. In these games, students learn to think like real-world professionals. These tools for developing and assessing complex STEM thinking are designed to be the infrastructure for a new, more motivating, and more inclusive approach to STEM education a decade or more in the future.

The candidate will work independently as an integral scientific member of a large research team, developing, implementing, and testing new technologies for learning and assessment.

Management duties will include oversight and tracking of research budgets and making recommendations for new research directions, major purchases, or research staffing adjustments to

support the priorities of the research group.

The successful candidate will provide scientific, technical, and mentoring advice, both orally and in writing, to others in this research group; the candidate will also facilitate contact with scientific collaborators on and off campus. He/she will solve problems in an independent manner, applying skills developed during previous research experience, while helping the research group develop or implement new research strategies.

The candidate will mentor junior scientists, prepare results for presentation at national and international scientific meetings, symposia and seminars, and prepare drafts of papers or grant proposals with others in the research group. He/she will prepare papers for publication in scientific journals, identify new lines of research support, and prepare grant applications.

These direct and indirect supervisory duties include helping graduate students and junior scientists with research priorities, experimental design, data analysis and reports/presentations.

As needed, the candidate will provide reports to the head of the research lab on the progress of individual investigators, laboratory projects, papers, or presentations under preparation.