הפקולטה לחינוך
למדע וטכנולוגיה

Faculty of Education
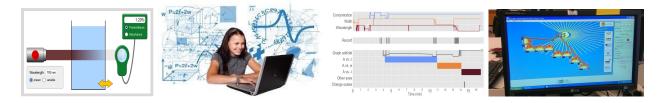in Science and Technology

Technion הטכניון
מכון טכנולוגי
לישראל

Technion
Israel Institute
of Technology

Postdoctoral Research Opportunity: Scientific Thinking in Virtual Labs

The Learning Analytics, Learning Design Lab at the Technion is looking for two postdoctoral fellows.

Relevant background. Any subset of the following fields:

- Learning analytics and educational data mining.
- Data science and machine learning.
- Science education (theory or quantitative methods).
- Cognitive Science.
- Inquiry learning and self-regulated learning in virtual environments.
- Assessment and psychometrics.

Project description. Virtual labs and interactive simulations are increasingly popular in science classrooms. Trace data from students' actions in the online environment can be used to evaluate engagement and learning. This project seeks to answer the following questions: How does productive inquiry look like? How can we support students' growth into competent scientists? What are the cognitive mechanisms of scientific inquiry and sense making? Can we design and validate a reliable assessment of scientific thinking? How can we automatically detect expert-like motivations and attitudes towards science?

Work performed. We look for exceptional postdoctoral fellows to address several of the questions above. Work includes organizing and analyzing existing data, designing and running experiments, conducting cognitive task analyses, collaborating with instructors and scientists, publishing, and applying to grants.

Qualifications.

- Relevant knowledge.
- Excellent oral and written communication.
- Curiosity.
- Independence and project management.

Interested? Please email the following to roll@technion.ac.il: your CV, names and contact info of two references, and a short letter explaining why you are interested.

Applications will be reviewed from Feb 20th until positions are filled. Start date: flexible.

Technion City, Haifa 3200003, Israel
קריית הטכניון, חיפה 3200003

Tel: +972-53-4255041
https://roll.net.technion.ac.il

roll@technion.ac.il
http://edu.technion.ac.il