



Technical Facilitators

Professional Certificates

The Data Sciences Institute (DSI) at the University of Toronto is a hub and incubator for data science research, training, and partnerships. The University of Toronto's data science research and training have consistently earned the top spot in Canada, reflecting our dedication to excellence and innovation in the field. Through engaging instruction for not-for-credit, continuing education Certificates, participants are equipped with essential technical skills to pursue a career transition into data science and machine learning roles.

Technical Facilitators, reporting to the Certificates Program Manager, are responsible for delivering technical learning content to the DSI's Certificate participants via live, online synchronous learning sessions to deliver the existing learning content (informational slides, assignments, homework, etc.). Technical Facilitators are responsible for ensuring effective delivery of the content found on the DSI's <u>GitHub.</u>

The primary objective for the DSI's Certificates is to upskill participants and prepare them for a transition into a role where they can apply the data science and machine learning skills developed through the Certificate. It is therefore essential that Facilitators ensure learning sessions include opportunities for participants to actively practice these skills. Technical Facilitators are leaders of the learning modules and are responsible for ensuring participant success. The DSI is invested in ensuring participant success and completion of the Certificates by as many participants as possible and is seeking Technical Facilitators committed to this goal.

Live learning sessions include:

- Explanation of technical concepts
- Live demonstrations and code-alongs
- Question and answer periods with participants
- Outlining of assignments and evaluations
- Facilitation of case study guest speakers (where applicable)

Additional Responsibilities

As leads for the delivery of learning modules in the Certificates, Technical Facilitators have additional administrative responsibilities:

- Direction of up to 3 Learning Support Staff responsible for assisting
 participants with learning material and evaluating learning assessments. It is
 the responsibility of the Technical Facilitator to take ownership of the learning
 module, ensuring participants are getting the help they need, and questions
 and/or blockers are resolved in a timely fashion by the Learning Support Staff
- Ensuring the relevant GitHub repository is accurate and updated with all necessary changes to learning content, information, dates, and deadlines as least one week prior to the start of the module (approximately 5 hours)
- Attending an instructional onboarding session (approximately 1 hour)
- Meeting the DSI Certificate team as needed prior to the launch of the learning module and following its delivery (approximately 2 hours)
- During active delivery of a learning module, responding to correspondence from the DSI team by the end of the following working day
- Meeting with case study facilitators to align on delivery plans (as needed)
- Hosting office hours before and after synchronous learning sessions
- Reviewing participant requests for extensions on assignments and granting as appropriate
- Ensuring participants get timely feedback on their work and their demonstrable skills
- Ensuring that all work is evaluated, and results provided to both the DSI team and participants within one week of the end of a course
- Where necessary, supplementing the responsibilities of Learning Support Staff as needed including addressing participant questions via Slack when appropriate

The DSI Certificates consist of 8 learning modules:

- Building Software (3 weeks)
 - Unix Shell, Git and GitHub (1 week)
 - Python (2 weeks)
- SQL (2 weeks)
- Applying Statistical Concepts (3 weeks)
- Scaling to Production (2 weeks)
- Visualization (2 weeks)
- Sampling (2 weeks)

- Algorithms and Data Structures (2 weeks)
- Deep Learning (2 weeks)

Delivery of a learning module

All learning modules follow a consistent schedule:

Technical Facilitators are responsible for:

- Tuesday, Wednesday and Thursday
 - Office hours
 - 5:30pm to 6:00pm & 8:30pm to 9:00pm
 - Synchronous learning module and/or case study
 - 6:00pm to 8:30pm

Learning Support Staff are responsible for:

- Attending office hours with Technical Facilitators
- Hosting work periods for participants to complete homework and assignments while
- Grading submitted assignments from participants
- Being available for participant questions via Slack

Breakdown of Hours

It is expected that Technical Facilitators will need to dedicate about 12 hours per week to the delivery of a learning module:

- 7.5 hours of live learning
- 3 hours of office hours
- 1.5 hours of administrative tasks

Qualifications/Skills

- Education, training, or relevant work experience in the topics covered by one or more of the learning modules
- Experience teaching or facilitating a technical topic in an education or training setting
- Demonstrated experience working collaboratively in a team
- Exceptional communication skills
- A keen interest in data science and machine learning, and helping others develop their technical skillset

Compensation

All Technical Facilitators are compensated at the rate of \$2418.57 per week of a learning module plus additional funds for updating the repository content. Payment is issued at the end of the month following the end of a learning module.

Application

To apply, please submit a resume/CV, and cover letter expressing interest to courses.dsi@utoronto.ca. Please be sure to highlight relevant teaching and/or industry experience. Applicants are welcome to apply to be part of the instructional team for more than one module. Applicants should include all modules they wish to be considered for in the body of their email.

Applications should be submitted by Wednesday August 7, 2024.