APSI070: Foundations of Data Analytics and Machine Learning

Summer 2020

Instructor: Jason Riordon - jason.riordon@utoronto.ca

Lecture schedule: Wednesdays, 13:00-16:00, starting May 13

Tutorials & Help Sessions schedule: Thursdays, 12:00-14:00, starting May 14

Course description:
This course covers topics fundamental to data analytics and machine learning, including an introduction to Python and common packages, probability and statistics, matrix representations and fundamental linear algebra operations, basic algorithms and data structures, discrete math and continuous optimization. The course is structured with both weekly lectures and tutorials/help sessions.

Grading:

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<tr>
<th>Project/Exam</th>
<th>Weight (%)</th>
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<tbody>
<tr>
<td>Project 1</td>
<td>20</td>
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<tr>
<td>Project 2</td>
<td>20</td>
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<tr>
<td>Project 3</td>
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<td>Project 4</td>
<td>20</td>
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<tr>
<td>Midterm Quiz</td>
<td>10</td>
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<tr>
<td>Final Quiz</td>
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Project submissions will be online through Quercus. It is the student’s responsibility to verify that projects are submitted on time. Projects that are late will incur a mark of zero.

Academic honesty:
Do not submit code that you have not written yourself. Students suspected of plagiarism on a project, midterm or exam will be referred to the department for formal discipline for breaches of the Student Code of Conduct.

Student responsibilities:
It is the student’s responsibility to attend lectures and labs, and ensure projects are submitted on time.

Inclusivity Statement:
All students and faculty at the University of Toronto have a right to learn, work and create in a welcoming, respectful, inclusive and safe environment. In this class we are all responsible for our language, action and interactions. Discriminatory comments or actions of any kind will not be permitted. This includes but is not limited to acts of racism, sexism, Islamophobia, anti-Semitism, homophobia, transphobia, and ableism. As a class we will work together to create an inclusive learning environment and support each other’s learning.

If you experience or witness any form of discrimination, please reach out to the Engineering Equity Diversity & Inclusion Action Group online, an academic advisor, a U of T Equity Office, or any U of T Engineering faculty or staff member that you feel comfortable approaching.
Accommodations:

If you have a learning need requiring an accommodation the University of Toronto recommends that students immediately register at Accessibility Services at www.studentlife.utoronto.ca/as.

Location: 4th floor of 455 Spadina Avenue, Suite 400
Voice: 416-978-8060
Fax: 416-978-5729
Email: accessibility.services@utoronto.ca

The University of Toronto supports accommodations of students with special learning needs, which may be associated with learning disabilities, mobility impairments, functional/fine motor disabilities, acquired brain injuries, blindness and low vision, chronic health conditions, addictions, deafness and hearing loss, psychiatric disabilities, communication disorders and/or temporary disabilities, such as fractures and severe sprains, recovery from an operation, serious infections or pregnancy complications.

Mental Health:

As a university student, you may experience a range of health and/or mental health issues that may result in significant barriers to achieving your personal and academic goals. The University of Toronto offers a wide range of free and confidential services and programs that may be able to assist you. We encourage you to seek out these resources early and often.

Health & Wellness Resources: undergrad.engineering.utoronto.ca/advising-and-wellness/health-wellness/
U of T Health & Wellness Website: studentlife.utoronto.ca/hwc

If, at some point during the year, you find yourself feeling distressed and in need of more immediate support, visit the Feeling Distressed Webpage: www.studentlife.utoronto.ca/feeling-distressed, for more campus resources.

Off campus, immediate help is available 24/7 through Good2Talk, a post-secondary student helpline at 1-866-925-5454.

All students in the Faculty of Engineering have an Academic Advisor who can advise on academic and personal matters. You can find your department’s Academic Advisor here: uoft.me/engadvising