UNIVERSITY OF TORONTO
OISE | ONTARIO INSTITUTE
FOR STUDIES IN EDUCATION

Code: Woodruff

APD 1210 RESEARCH PRACTICUM COURSE

PROJECT DESCRIPTIONS 2023-24

FALL/WINTER

Name and Title: Earl Woodruff, B.Sc., B.Ed., M.A., Ph.D. & Milan Lazic: PhD student in Developmental Psychology and Education

Lab Website: Emotions and Learning Optimization Lab

TITLE OF RESEARCH PROJECT: Facilitating the Process of Understanding in Real-time: A Machine Learning Approach

NUMBER OF STUDENT PLACES AVAILABLE: 1

PRIMARY MODE OF RESEARCH PLACEMENT PARTICIPATION (circle one option and describe):

___IN PERSON *_X__REMOTE (ONLINE)* *____HYBRID/FLEXIBLE*

Meetings and assigned responsibilities will be had and completed remotely

OBJECTIVES AND METHODOLOGY: This project is investigating how the process of understanding unfolds in a coherent fashion based on the emotions, physiology, and trait variables of learners. The aim is to develop an intelligent tutoring system using machine learning that tracks how understanding develops in real-time and facilitates this process.

DESCRIPTION OF STUDENT PARTICIPATION: Student responsibilities will include but may not be limited to the following: assisting in the development of a machine learning model, study design, and conducting a literature review. 8-10 hours of work per week (maximum) will be expected. Students can expect to become familiar with developing a machine learning model, designing a research project that involves data collection on a large scale, and learn to build on previous studies within a given research field.

DESCRIPTION OF PREFERRED SKILLS/BACKGROUND (OPTIONAL): Strong background in computer science and machine learning

DAY AND TIMES OF LAB MEETINGS: Thursdays at 10:00am (weekly)