

MDII and NSERC CREATE BEST 1st annual student poster event

		Title (Poster)	Supervisor(s)
Sensors and HW			
1	Maryam Khodami	Kinetics extraction and enhanced immunoassay using long range surface plasmon waveguides	Pierre Berini
2	Oleksiy Krupin	Long-Range Surface Plasmon-Polariton (LRSP) Waveguide Biosensors for Disease Detection	Pierre Berini
3	Ross Cheriton	photonic power for medical implants	Karin Hinzer
4	Sareh Soleimani	Respiratory Rate Estimation by Unobtrusive Pressure-Sensitive Sensor Array during Movement	Martin Bouchard, Rafik Goubran and Frank
5	Emmanuel Chiedu Okocha and Miranda Holder	Sensor platform using humidity sensors: An exploration into various types and abilities	Jeongwon Park
6	Danilo Catelli	Biomechanical Improvement Score Comparison between Dual Mobility and Conventional Bearings in Total Hip Arthroplasty Patients during Squat	Mario Lamontagne
7	Taisa R. Stumpf, Patrick Fournier, Eve Tsai and Xudong Cao	Biosynthesized Cellulose as a Novel Drug Delivery System to Stimulate Brain Tissue Regeneration after Stroke	Xudong Cao
8	Andrew Dam and Hao Luo	Android Application for Managing Bluetooth Sensors	Jeongwon Park
9	Adefemi Adeyemi	MICROFLUIDIC DEVICES FOR CHARACTERISATION AND MANIPULATION OF ENCAPSULATED CELLS IN AGAROSE MICROCAPSULES USING DIELECTROPHORESIS AND ELECTROPHORESIS	Michel Godin
10	Eric Beamish	Identifying structure in short DNA scaffolds using solid-state nanopores	Michel Godin
11	Ainara Benavente	ENCAPSULATING SINGLE CELLS AND TRACKING CELL MIGRATION IN HYDROGELS	Michel Godin
12	Rushi Panchal	Characterization of Modified Agarose Microcapsules for Therapeutic applications using Microfluidic Devices	Michel Godin
Systems, Services and Frameworks			
13	Mehdat Elsayed	Reinforcement learning in wireless networks for smart health applications	Melike Erol-Kantarci
14	Laamarti Fedwa	Multi-wearables Cloud Health System Based on ISO/IEEE 11073 Standard	A. El Saddik

15	Hawazin Badawi	Mobile Cloud-Based Physical Activity Advisory System Using Biofeedback Sensors	A. El Saddik
16	Hala As'ad	Advanced spatial cues preservation for modern binaural hearing aid applications	Martin Bouchard Martin Bouchard, Rafik Goubran and Frank Knoefel
17	Hilda Azimi	Smart bed technology for breathing monitoring	Ed Lemaire
18	Theja Ram Pingali	Human Accompanying wheelchair using Ultrasonic Tethering	James Green
19	Bekele Amente	Patient Monitoring in NICU using pressure sensitive mats and video analysis	Liam peyton
20	Azarm Mana	Towards a Person-Centric Healthcare System: MyPHR	Liam peyton
21	Lakhani Rubina	Development of a Collaborative, Functional Scoring App	
22	Cem Kaptan	Fast emergency hospitalization service for in-home patients: A case study for Manhattan County	Burak Kantarci
23	Hamideh Ghanadian	Contactless Measurement of Heart Rate	Hussein Al Osman
24	Madelon Clifford	Virtual and Augmented Reality technologies for anatomy learning	Pascal Fallavollita
25	David Burbidge	Magic Mirror: Mixed-reality framework for visualizing musculoskeletal anatomy	Pascal Fallavollita Daniel Amyot and Wojtek Michalowski
26	Kamyar Ziabari Rubina Lakhani and Miguel	A virtual patient navigation application supporting patients under cancer diagnosis	
27	Garzon	A Framework for Collaborative Healthcare Monitoring	Liam peyton
28	Pilar Mata	A Development Methodology for a Stroke Rehabilitation Monitoring Application Determining Objective Measures to Improve Surgical Treatment of Hirschsprung Disease	Liam peyton Adrian Chan and Eranga Ukwatta
29	Jinu Kurian		

Analytics and Wearables

30	Aljaahfreh Mohamad	Fatigue Analysis for Repetitive Haptic Interactions	A. El Saddik
31	Tabassum Rahman	Cognitive demands alter the cerebral oxygenation patterns of younger adults during dual-task walking	Sarah Fraser
32	Amélie Gauthier-Beaupré	Mobile Applications for Older Adults with Chronic Disabilities	Jeffrey Jutai

33	Johnny Farah Maxine Perrin and Hajer Chalghoumi	Feature Selection for Local Sensor System Gait Phase Identification in Orthosis-Control	Natalie Baddour and Ed Lemaire Dr. Virginie Cobigo and Dr. Jeff Jutai
34		An accessible application for medication management	
35	Francois Charih	Extending the SHOEBOSX Audiometry mobile audiometer with an automated audiogram classification system	James Green
36	Alex Obinikpo	Crowd-Sensing for Data Acquisition and Predictive Analysis in Mobile Health	Burak Kantarci
37	Issa Ayoub	Affect Classification from Facial Expression	Hussein Al Osman Adrian Chan and Dr. Sreeraman Rajan
38	Mohamed Abdelazez	Ambulatory Electrocardiograms Quality Analysis	James Green
39	Yasmina Souley Dosso	Tongue Tracking using Convolutional Neural Networks and Transfer Learning	Natalie Baddour and Ed Lemaire
40	Franck Tchuente	Classification and Recognition of Aggressive Movements using Smartwatches	
41	Poppy DesClouds and Fedwa Lamarti	Smartphones and varsity athletes: Are they helping or hindering performance and development?	Natalie Durand-Bush and Abdulmotalieb El Saddik
42	Azadeh Dastmalchi Diana Patricia Tobón	VitalTracer: Smart Health Watch to Monitor all Vital Signs Continuously	Hilmi Dajani
43	Vallejo	Emotional state detection from physiological signals based on machine and/or deep learning techniques	A. El Saddik
44	Tasnim Abdallah	Use of Technology to Reduce Communication Barriers at the Point-of-Care	Pascal Fallavollita
45	Behnam Alimohammadisagvand	Use of predictive analytic to identify risk of postoperative complications among the women undergoing the hysterectomy surgery for endometrial cancer	Wojtek Michalowski
46	Kristen Beange	Validation of a wearable sensor mobile application for the evaluation of spine movement quality	Ryan Graham and Adrian Chan