

Nicholas Burgwin, P.Eng.



EMPLOYER AND POSITION

Toronto Metropolitan University, Manager, Innovation & Commercialization

EDUCATION

MASc., Electrical Engineering – Ryerson University – 2016

BASc., Electrical Engineering – University of Toronto – June 2010

EMPLOYMENT HISTORY

2022 – Present	Toronto Metropolitan University, Manager, Innovation & Commercialization
2015 – Present	University of Toronto, Administrator for ECE 4th Year Design Course (ECE496)
2016 – 2022	Fibos Inc., Co-Founder and CEO
2014 – 2016	Ryerson University, Graduate Assistant
2013 – 2016	NBCircuits, Part-Time - Owner, Electronics Design Engineer
2013 – 2014	Advanced Test & Automation, R&D Electrical Technical Lead
2012 – 2013	L-3 Wescam, Electrical Hardware Engineer
2010 – 2012	mySpark Technologies, Electrical Hardware Engineer

ACTIVITIES IN ADVOCACY ORGANIZATIONS

PEO East Toronto Chapter Board Member, Treasurer

YEARS OF REGISTRATION WITH PROFESSION

Ontario Professional Engineer since May 2015

PROFESSIONAL AFFILIATIONS

Administrator for ECE496 (Design Course) at the University of Toronto – 7th year

COMMUNITY SERVICE

SDTC Seed Fund Jury member (2 times)

Vex Robotics – Design Judge (5 events)

Formula Bharat – Design Judge (4 events, held in January in India each year)

Founder of Formula North (now Formula SAE North) – Director for 8 years

CONFERENCE OR TECHNICAL PAPERS

Many different technical and business presentations associated with optical measurements and the technology developed at Fibos. A few notable events include Photonics North, PIWG Technical Conference, Western Regional Strain Gauge Committee, Sensors Expo, Automotive Testing Expo, Shenzhen pitch competition.

CANDIDATE STATEMENT

Nicholas graduated from the University of Toronto in 2010 as an Electrical Engineer and went straight into industry. Throughout his time in industry, he worked on a number of sensor applications and quickly began to recognize the limitations that exist with electrical solutions. A better alternative had to exist, and this was found through research being done at Ryerson University with fiber optic sensors. With a background in solving real world problems, Nicholas went back to school and completed his Master's degree at Ryerson University in August 2016, with his research focused towards developing a unique, low-cost solution that could enable the replacement of conventional electrical strain gauges. Fibos was not a success, but after operating for 6 years and employing over 36 individuals, the experience was invaluable. Nicholas has returned to Toronto Metropolitan University (formerly Ryerson) to manage the university's Intellectual Property portfolio and support researchers commercialize their technologies. Nicholas obtained his Professional Engineer certification in September 2015 and has been a strong supporter of the education of future engineers, acting as a course administrator at the University of Toronto and volunteering for a number of different events, such as VEX, and Formula North. The opportunity to continue to be involved with the OSPE Board would be an honour and in-line with the desire to educate and grow the engineering community in Ontario.