

## Hiring Manager

April 14, 2022

CITY OF TORONTO  
55 JOHN ST.  
TORONTO, ONTARIO

### Job Application for an Engineer in Training

Dear Hiring Manager,

Good afternoon, I am writing in response to your posting for a Engineer in Training (ID 26385). I am an EIT, currently employed at Ontario Clean Water Agency in the region of Kitchener/Waterloo as a Maintenance Management Specialist.

I have recently completed my Master's of Science at Ryerson University for Chemical Engineering, where I researched *chemical reactor engineering*. I have studied and designed water and wastewater treatment technologies for over 3 years. My primary focus is the application of bioreactors for biological nutrient removal. My research has required the operation and a design of multiple research studies.

In my current role of Asset Maintenance Specialist, I've had the opportunity to work on multiple Capital Projects. I have written Request for Bids (RFB) for multiple projects, including the resurfacing of roofs for about 20 different facilities within the region of Waterloo. I have also taken part in tenure evaluations, the latest being for Flow Meter calibration and verification. I have completed my Project Management contact hours, and I am currently a PMI member.

I have a strong background in Data Science supported by multiple certificates. I am proficient in Excel, Google Sheets, MS Access, SQL, the R programming language, Python and many more. I have also worked in multiple Computerized Maintenance Management Systems (CMMS) as a maintenance planner.

I would like to thank you for your time and for your considerations. I look forward to hearing back from you. Please feel free to call me at (647) 400-4679 or email me at m2edney@gmail.com

Sincerely,

**Mark Edney**

# Mark Edney

ENGINEER IN TRAINING

Toronto, Ontario

☎ (647) 400-4679 | ✉ m2edney@gmail.com | 🌐 mark-edney | 🌐 edneymark

*Researched Water and Wastewater treatment technologies for over 3 years. Employed in the water treatment industry for another 3 years in the capacity of an Asset Management Specialist/Project Manager.*

## Summary

- MaSC in Chemical Engineering (Ryerson)
- Engineer in Training (PEO)
- PMI Member
- Data Scientist

## Education

### Masters of Science in Chemical Engineering

Toronto - Ontario

RYERSON UNIVERSITY

2018 - 2020

- Master's Thesis: Investigation of the Flow Dynamics of a Vertical Bioreactor using the Residence Time Distribution
- Presented research at the 69th Canadian Chemical Engineering Conference in Halifax, NS
- Wrote professional level reports for thesis and different coursework
- Related course work: Advanced process control (CE 8202), Decentralized waste water treatment technologies (CE 8702), Advanced Modeling Techniques (CE8204), Advanced Reactor Engineering (CE8403) and Modelling and Simulation (CE8201)

### Bachelor of Engineering Chemical Engineering (Co-op)

Toronto - Ontario

RYERSON UNIVERSITY

2006 - 2011

- Capstone Project: Design of Biological Nutrient Removal (BNR) wastewater treatment plant for a meatpacking plant
- Related course work: Law and Ethics, Water and Wastewater Treatment, Air Pollution and Control, Process and Engineering Optimization, Process Control

## Employment

### Asset Maintenance Specialist

Kitchener - Ontario

ONTARIO CLEAN WATER AGENCY

Jun. 2021 - Present

- Participated in Capital Projects including: writing Request for Services (RFS), evaluating bids and act as liaison for service providers
- Act as data owner for the region of Waterloo's wastewater computerized maintenance management system
- Built reports and dashboards with engaging visualizations with Power BI
- Incorporate Kanban principles (Trello) into department workflow

### Graduate Assistant/Researcher

Toronto - Ontario

RYERSON UNIVERSITY

Sept. 2018 - Oct. 2020

- Assistant for following classes: CHE204, CHE214, CHE215, CHE426, CHE615, CHE616
- Marked Co-op term reports by utilizing time management skills to complete on schedule without interrupting experiment/research activities
- Studied the behaviour of a novel vertical bioreactor in water engineering, applying chemical reactor engineering techniques (Thesis)
- Invigilated examinations to uphold academic integrity within Ryerson University

### Quality Assurance Technician

Mississauga - Ontario

WAL-MART LOGISTICS CANADA

July 2014 - June 2021

- Perform frequent Quality Assurance checks on merchandise received from suppliers
- Corrected quality assurance mistakes by following standard operating procedures to create a more accurate warehouse database
- Coach new employees by clearly communicating my years of knowledge and experience to reduce errors and increase productivity

### Asset Management Specialist (Project Manager)

Mississauga - Ontario

ONTARIO CLEAN WATER AGENCY

Dec. 2011 - Feb. 2013

- Part of project management team to add value to our customers
- Created preventative maintenance management plans as a deliverable
- Wrote professional standard operating procedures for maintenance activities
- Performed audits on computerized databases
- Spearheaded a project for the city of London and Cambridge for two new sludge treatment facilities
- Modernized the South Peel Computerized Maintenance Management System (C.M.M.S) with supplemental information from professional resources (P&ID drawings and O & M manuals)

## Skills

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<b>Programming Languages</b>	Python, R, Matlab
<b>Visualizations</b>	Tableau, Power BI, GGplot2
<b>Markup Languages</b>	CSS, HTML, Latex, Markdown, RMarkdown
<b>Microsoft Office</b>	Excel, Outlook, OneNote, PowerPoint, Visio, Word

## Certifications

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### Deep Learning Specialization

COURSERA: DEEPLARNING.AI

January, 2022

- Neural Networks, Convolutional Neural Networks, Sequence Models
- Structuring Machine Learning Projects

### Google Data Analytics

COURSERA: GOOGLE

August, 2021

- Foundations of Data Analytics
- SQL, R, Tableau

### Data Science Specialization

COURSERA: JOHNS HOPKINS UNIVERSITY

May, 2021

- R, Git

### Professional Practice Examination

PROFESSIONAL ENGINEERS OF ONTARIO

August, 2018

### Certified Lean Six Sigma Yellow Belt

GO LEAN SIX SIGMA

August, 2018

### Excel with Macros and VBA Record of Achievement

GEORGE BROWN COLLEGE

June, 2017

### AutoCAD Fundamentals

GEORGE BROWN COLLEGE

June, 2017

- Advanced 2D
- Introduction to 3D

### PMP Exam Prep Course (35 contact hours)

PMCAMPUS

November, 2015

## Affiliations

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### Professional Engineers of Ontario

ENGINEER IN TRAINING

### Canadian Society of Chemical Engineers

MEMBER

### Ontario Society of Professional Engineers

MEMBER

### Project Management Institute

MEMBER

### Ryerson Tri-Mentoring Program

MENTOR