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**SKILLS**

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**Technical**

- Experienced with pavement and materials testing procedures and standards
- Familiar with many soil analysis procedures (sieve analysis, hydrometer analysis, Atterberg limits, consolidation, compaction, direct shear, permeability)
- Familiar with MTO roadside design standards and guidelines
- Strong data analysis and technical writing skills
- Exposure to building and property inspection and field surveying methods

**Computer**

- Skilled with AutoCAD, Microsoft Office (Word, Excel, PowerPoint), Photoshop
- Familiar with MATLAB, HTML, CSS, JavaScript

**Personal**

- Demonstrated leadership capabilities through coaching and captaining experiences
- Independent, creative, organized, quick learner

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**EDUCATION**

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**University of Waterloo***Candidate for Bachelor of Applied Science, Civil Engineering*

Waterloo, ON

Sep. 2011 – Apr. 2016

**Concrete Testing Report**, Structures and Properties of Materials, Nov. 2012

- Mixed and tested slump of different concrete mixtures based on water content
- Tested tensile and compressive strength of concrete cylinders

**Soil Analysis Report**, Earth Engineering, Mar. 2012

- Determined soil type through analysis of sieve test and hydrometer test
- Determined liquid limit, plastic limit and plasticity index of soils using standard test procedures

**Preliminary Design Report**, Civil Engineering concepts, Dec. 2011

- Data collection and preliminary design of hypothetical culvert installation
- Conducted field survey using transit
- Created detailed site maps using AutoCAD

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**WORK EXPERIENCE**

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**Ontario Ministry of Transportation***Road Design Engineering Assistant*

St. Catharines, ON

Sep. – Dec. 2013

- Updated drawings for roadside barrier installations (temporary concrete barrier, cable guide rail)
- Updated drawings for MTO Bikeway Design Manual and AODA compliant Detectable Warning Systems
- Carried out quantity and cost estimates for safety improvement alternatives
- Prepared a report comparing the inlet capacities of various commonly used catch basin drainage grates

**Ontario Ministry of Transportation***Road Maintenance Engineering Assistant*

St. Catharines, ON

Jan. – Apr. 2013

- Assisted in writing a paper for the on the effects of climate change on winter road maintenance
- Analyzed Ontario climate data for use in winter maintenance database
- Assisted in organizing the 2<sup>nd</sup> annual MTO Pavement Markings Workshop

**LVM Inc.**

Toronto, ON

*Laboratory Technician*

May – Aug. 2012

- Performed QA testing on various materials, including hot mix asphalt, asphalt cement and asphalt emulsion
- Responsible for receiving, preparing and testing of samples according to standard test procedures and project requirements (ASTM, OPSS, AASHTO)

**International Erosion Control Systems**

LaSalle, ON

*Drafting Technician*

2008-2011

- Prepared AutoCAD drawings of concrete erosion control blocks for various projects
- Exposed to basic erosion control measures

**D.W. Machina Civil and Environmental Consulting Services**

LaSalle, ON

*Field Technician*

Aug. 2011

- Assisted with building and property inspection on Phase I environmental site assessment
- Prepared site report using field notes

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**VOLUNTEER EXPERIENCE**

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**South County Volleyball Club Developmental Program**

Windsor, ON

*Assistant Coach*

Oct. 2010 – Aug. 2011

- Aided students ages 7 to 14 in basic skills and strategies of volleyball
- Assisted head coach with skill demonstrations and education, ran warm-up activities, facilitated gameplay situations

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**AWARDS AND CERTIFICATIONS**

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- Windsor-Essex Chapter Professional Engineers Ontario Scholarship, Nov. 2011
- President's Scholarship, University of Waterloo, August 2011
- Queen Elizabeth II Aiming For The Top Scholarship, Sep. 2011
- Ontario Scholar Award, June 2011
- Ontario French Immersion Certificate, Jun. 2011
- Sandwich Secondary School Honour Roll, 2008-2011

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**ACTIVITIES AND INTERESTS**

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**Volleyball**

- Captain of Civil Engineering class team, 2012 – present
- High School Team member, Nov. 2007 – Mar. 2011

**Art**

- In the process of writing and drawing an adventure/fantasy webcomic
- Developed comic hosting website using HTML and CSS

**Math Club**

- Participated in CEMC sponsored contests, Sep. 2007 – Dec. 2010
- Achieved top 25% in Fermat Contest, Feb. 2010
- Achieved top 25% in Pascal Contest, Feb. 2008