

## **SKILLS**

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### **Technical**

- Familiar with asphalt, concrete, and soil testing procedures and standards
- Knowledgeable with MTO roadside design standards and guidelines
- Exposure to building and property inspection, project management, and field surveying methods
- Strong data analysis and technical writing skills

### **Computer**

- Skilled with AutoCAD, Microsoft Office (Word, Excel, PowerPoint), Photoshop
- Familiar with, MATLAB, HTML, CSS
- Exposure to Synchro, SAP2000, 3ds Max, JavaScript

### **Personal**

- Demonstrated leadership capabilities through coaching and captaining experiences
  - Strong organization and time management skills
  - Independent, creative, 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

#### **Transport Principles and Applications (CIVE 342)**

- Determined optimal geometric and pavement design for a highway based on a set of design criteria
- Introduced to queueing theory and demand models

#### **Geotechnical Engineering 1 (CIVE 353)**

- Determined soil characteristics through lab testing (compaction, consolidation, direct shear, permeability)
- Analysed effective stresses on soils in order to determine failure criteria

#### **Structures and Properties of Materials (CIVE 265)**

- Tested slump, air content, and tensile and compressive strength of different concrete mix designs
  - Performed tensile strength testing on a variety of industrial polymers and steels
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## **WORK EXPERIENCE**

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### **Amico Infrastructures**

*Student Project Manager/Field Assistant*

Windsor, ON

May – Aug. 2014

- Assisted project manager with field and office duties on Rt. Hon. Herb Gray Parkway
- Collected and tracked foreman paperwork (timesheets, trucking and stone tickets, safety documents)
- Managed quality inspection documents and Time and Materials documents for work done outside contract

### **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

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

St. Catharines, ON

Jan. – Apr. 2013

- Assisted in writing a paper 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.***Laboratory Technician*

Toronto, ON

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***Drafting Technician*

LaSalle, ON

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***Field Technician*

LaSalle, ON

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***Assistant Coach*

Windsor, ON

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