Junting (Eric) Li

7 Lorraine Drive Unit 1907, Toronto, ON, M2N 7H2
(647) 866-1003
juntingeric.li@mail.utoronto.ca

EDUCATION

Master of Applied Science **2016 - 2018**
Department of Civil Engineering, University of Toronto
- Graduate advisor: Prof. Benda McCabe and Prof. Kim Pressnail

Bachelor of Applied Science, High Honours **2012 - 2016**
Department of Civil Engineering, University of Toronto
- University of Toronto Excellence Award, Oscar J. Marshall Scholarship

TECHNICAL SKILLS

- Design Tools: AutoCAD, WUFI, HOT2000, Revit, CONTAM, EnergyPlus
- Applications: Microsoft Word, Powerpoint, Excel, Project, Visio
- Programming: Stata, Matlab, C, Excel VBA

RELEVANT EXPERIENCE

Building Condition Assessor, BGIS, Toronto **2018 - Present**
- Completed Property Condition Assessments (PCAs) on over 100 buildings in accordance with ASTM E2018-01 for office towers, shopping malls, and stand-alone retail branches
- Conducted non-destructive inspection on building components including building envelope, interior finishes, mechanical, electrical, and plumbing system
- Evaluated the observed deficiencies and provided repair or replacement recommendations to minimize the risk of emergency shutdown, weather damage, or potential safety hazard
- Reviewed architectural drawings, past projects and environmental reports to estimate the quantity and age of each building components, as well as potential environmental concerns
- Generated reports to summarize the assessment findings and 10-year asset management plans for capital budget planning

Master of Applied Science Candidate, University of Toronto, Toronto **2016 - 2018**
- Proposed a mitigation strategy, Compartmentalization, to reduce the impact of the stack effect such as fire smoke migration, extensive energy loads, and poor indoor air quality
- Used nodal network approach (CONTAM) to efficiently calibrate the airflows and pressure distribution in a 12-story residential building, and then extended the scale to a 48-story residential tower
- Conducted a business case and benchmarked the potential benefits of compartmentalizing buildings including 57% reduction in the HVAC energy usage, reliable odour/smoke control, and proper ventilation rate in every tenant's suite

Summer Internship, Infrastructure Ontario, Toronto **Summer 2016**
- Participated in the project management of five historical governmental buildings retrofitting program, with a total budget over $1.2B and a timeline of 8 years
- Reviewed reports submitted by third-party consultants, and identified on technical inconsistencies to improve the accuracy of the total project cost for risk management
- Assessed the competency of all candidates for selecting the Planning Design Compliance Consultant (PDC) as the "owner's engineer". Criteria used were the company profile, the staff experience, and the approach to resolving potential risks in the project
- Conducted memorandums on Climate Change Action Plan and Carbon Neutrality, and prepared presentation materials for client meetings and team discussion

Research Assistant to Professor Jeffrey Siegel, University of Toronto **Summer 2015**

- Constructed a model using STATA to apply Filter Forensics Theory to 10 million data points to reflect Canadian residential indoor air quality in Toronto Community Housing buildings
- Collaborated with Toronto Atmospheric Fund (TAF) to execute onsite work including measurement equipment installation, and raw data processing for a $1.5M project
- Designed analysis process to improve CO2 data collection process with the K30 device
- Generated reports that were presented to the TAF and research group

Research Assistant to Professor Frank Vecchio, University of Toronto **2013 - 2014**

- Assisted Ph.D. level research that enhances the strength of reinforced concrete structures
- Constructed concrete shear panels with a high degree of precision such that very accurate experimental results were obtained
- Conducted concrete tensile and shear strength using four-point bending test and shear force panel test to determine the effectiveness of steel fibre in reinforced concrete
- Analyzed the data collected over 12 different sets of concrete designs and determined the optimal range of dosage of steel fibre

LEADERSHIP EXPERIENCE

Project Director, U of T Solar House Design Team, Toronto **2015 - 2016**

- Responsible for the design of a balcony system that will cut energy use and CO2 emissions by 65% when comparing to existing balcony systems
- Modeled the performance of the balcony system using HOT2000 and eQUEST
- The balcony will compete against teams around the world at the Solar Decathlon Competition

Concrete Director, U of T Concrete Toboggan Team, Toronto **2014 - 2015**

- Managed a team of 5 students to design, procure, and manufacture the ski of a concrete toboggan that was entered into the Great Northern Concrete Toboggan Race (GNCTR)
- Balanced competing objectives of concrete strength, sustainability, and practical application using an iterative mix design process
- Collaborated with material sponsors, lab supervisors, and ski shape designer to complete ski design and ski manufacturing (casting)
- Conducted 3 months of research that resulted in improved cementitious material properties which allowed for a 25% improvement in toboggan performance

Marketing Analyst, APAE Santa Cruz do Sul, Brazil **Summer 2014**

- Reengineered APAE's Marketing strategy through internal and external analysis of the organization's human resource, market environment, and marketing strategy
- Identified the problems existing in the marketing environment as well as database system
- Produced a report summarizing marketing issues and identifying corresponding potential solutions as well as sample marketing e-booklet and online video ad

INTEREST

- Guitar, Snooker, Badminton, Ping Pong, Basketball
- Semi-professional photographer for weddings