# Michael Elliot King — Curriculum Vitæ

Deparment of Mechanical Engineering McGill University 817 Sherbrooke Street West Montreal, Quebec H<sub>3</sub>A oC<sub>3</sub> Canada **a** 1 (774) 251-9014

™ michael.king2@mail.mcgill.ca

• www.michaelelliotking.com

michael-king

Born: February 14, 1991 — Qunicy, MA

Nationality: American

## SUMMARY

I am an undergraduate Mechanical Engineering student interested in engineering design, robotics, and human computer interaction. I am currently looking for full time employment following my graduation in May 2014.

# **EDUCATION**

#### 2009 - Present

# **B.Eng.**, Mechanical Engineering

McGill University, Montreal, Quebec

## RELEVANT EXPERIENCE

#### 8/2013 - Present

## MECHANICAL ENGINEERING LEADER | CONTROL SYSTEMS

McGill A.U.V. Robotics Design Team - Montreal, Quebec

Supervised by Professor Meyer Nahon

- Lead all mechanical design and manufacturing for a team of 80 students creating an autonomous underwater vehicle
- Design, simulate, and build control system for the propulsion of an unmanned submarine [Capstone Poject]
- Complete CAD of the vehicle for FEA, dynamic modeling, and simulations

#### Summer 2012 & Summer 2013

#### PAID ENGINEERING INTERNSHIP

Robies Heating & Cooling HVAC - Hyannis, Massachusetts

- Calculated thermal loads
- Developed and implemented automated programs for generating project estimates
- · Developed workflow and inventory management system
- · Recorded and analyzed air data
- Provide company wide technical support
- Prepared reports for clients and staff
- Analyzed sales trends and provided detailed reports

#### Summer 2013

#### CONTROL SYSTEMS ENGINEERING INTERNSHIP

T. Davlin Glass – Cambridge, Massachusetts

Designer gold-leaf glass tiles and glass products

- Designed, manufactured, and wired systems to control the temperature of custombuilt, high-powered glass kilns
- Aided in the design and construction of additional kilns

#### 8/2012 - 8/2013 MATERIAL COLLECTION SYSTEM LEADER | MARKETING MEDIA DIRECTOR

McGill LunarEx Robotics Design Team - Montreal, Quebec

Placed 12th out of 50 international teams at NASA's Lunabotics Mining Competition – Orlando, Florida Supervised by Professor Peter Henry Radziszewski

- Member of 40-man team creating an autonomous mining lunar robot
- Lead the efforts of a five person group responsible for designing, constructing and assembling the mechanism that collects and dumps lunar regolith simulant
- Brought original concepts to realization through sketching, CADing, machining, assembly, and testing
- Developed rebranding strategies to increase interest and team credibility
- Enhanced project marketing and sponsorship visibility through media exposure
- Designed logos and graphics and created team apparel, posters, and banners
- Documented each step of the design process, meetings, outreach, and competition with my photography
- Shot, directed and edited a promotional film that was sent to all sponsors and shared on social media outlets

#### 1/2013 - 8/2013 FRONT END USABILITY LEAD

 ${\it Braille\ University\ iPhone\ Application\ -\ Montreal,\ Quebec}$ 

Tool to aid in teaching Braille to blind children using an electronic medium Supervisored by Professor Jeremy Coopsertock, McGill Center for Intelligent Machines

- Created a mobile application with two other students, focusing on usability and the user interface
- Using a user-centered design approach, created prototypes, conducted user-tests, and coded the application to be easy to use, even for the blind
- Collaborated with Braille education professionals to create an authentic curriculum and legitimate learning tool (Anne Jarry, Nathalie Martiniello: *Univerisité de Montréal*)

# Software & Programming Skills

Computer Aided Design: Autodesk Inventor, AutoCAD, Solidworks

Data Analysis: MATLAB, Excel Scripting Languages: Python

Programming Languages: C, C++, Objective-C

Version Control Systems: Git Markup Languages: HTML5, CSS3

Website Management: Google Analytics, SEO

Digital Typesetting: LATEX

Media & Graphics: Photoshop, Illustrator, Lightroom, Final Cut Pro

Please contact me for professional references.