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Curriculum vitae

Resumé

Last Update: November 21, 2019

PERSONAL DATA

Joshua Ching

40 Glenhaven Street
Markham (Ontario)
L6C 2W8

Language of correspondence
ENGLISH

Citizenship
Canadian

Employment Equity
**Member of visible
minorities**

Security clearance
Yes

ACADEMIC DATA

Program of studies

**BASc in Biomedical Mechanical Engineering /
BSc in Computing Technology (Co-op)**

Year Level

2

Cumulative grade point
average

8.27

letter equivalent of university of
ottawa cumulative grade point
average

10=A+	9=A	8=A-	7=B+	6=B	
5=C+	4=C	3=D+	2=D	1=E	0=F

Work term information

Term

Employer

Overall evaluation

1. 2020, Summer

2. 2021, Winter

3. 2021, Fall

4. 2022, Summer

* a blank field in the - overall evaluation - column means that the evaluation has not yet been submitted by the employer

Joshua Ching

LANGUAGES

Language Name	Speaking Level	Writing Level	Comprehension Level
English	Fluent	Fluent	Fluent
French	Basic	Fluent	Intermediate
Mandarin	Intermediate	Basic	Intermediate

EDUCATION

September 2018 - December 2023 **B. of Applied Science in Biomedical Mechanical Engineering and B. of Science in Computing Technology**
University of Ottawa (Ottawa, ON)

- Presently in 2nd year
- Fall 2019 - Admissions Scholarship (\$4000)
- Winter 2019 - Dean's Honour List

SKILLS

Engineering

Mechanical

- Contributed to the design of a device that translates the drawing on a whiteboard to an image in real time on a website for a design course
- Designed several parts with SolidWorks and the Autodesk Suite, including a Raspberry Pi case
- Manufacturing proficiency with the drill press, lathe, mill, laser cutter, soldering kit, and 3D printer

Biomedical

- Contributed to the design and manufacturing of a 4-degree of freedom hip exoskeleton for rehabilitation
- Facilitated the design of an infant CPR manikin that provides feedback with a pressure sensor and LED matrix connected to an Arduino controller
- Performed and analyzed several gait experiments

Computer

Programming

- Used MATLAB to implement a machine learning algorithm for gait
- Developed a basic Lights Out game, including randomizing, solutions, and resetting capabilities using Java and Swing GUI
- Comprehensive knowledge of data structures in Java, Python, and C/C++
- Created a basic professional portfolio using HTML and CSS

Architecture

- Expertise of modern Windows operating systems, Linux, and OSX
- Resolved tickets for various softwares using Spring MVC, and Hibernate ORM
- Proficiency with analysis of SQL using MySQL and PostgreSQL systems

Communication

Written

- Researched and wrote an essay on wind farm optimization in Ontario
- Completed a technical report regarding the 1981 Hyatt Regency Walkway Collapse for a report-writing course
- Wrote a user manual for instructions on using a whiteboard writer for a design course

Oral

- Presented various topics using PowerPoint and Google Slides on behalf of clubs

and projects

- Took on a leadership role to co-ordinate a month-long design process for the Bio-Buddy Design Competition
- Provided counsel and writing advice as Physics Team Leader for uEducate

WORK EXPERIENCE

September 2018 - Present

Technical Captain

uOttawa Bionics (Ottawa, ON)

- Contributed to the technical progress and gave counsel to the development of a four-degree of freedom (DOF) hip-mounted exoskeleton for rehabilitation;
- Designed and manufactured the electrical subassembly of the exoskeleton and a suit stand for showcasing;
- Conducted preliminary research to further optimize the design of the exoskeleton's hip and cuffs;
- Administered the budget and handled purchase requests

May 2019 - August 2019

Software Quality Assurance Intern

Beijing Youxuan Software (Waterloo, ON)

- Resolved tickets for a cross-platform office administration application using Java, JavaScript, and Spring MVC;
- Enhanced communication skills with international colleagues;
- Worked with the QA team to conduct integration and functional testing

OTHER WORK EXPERIENCE

July 2017 - August 2017

Camp Counsellor

Camp de Jour Ville d'Alma (Alma, QC)

- In a French learning environment, demonstrated leadership by supervising campers between 6 and 9 years;
- Encouraged teamwork among other counsellors to ensure the safety of campers;
- Developed organizational skills by conducting activities for campers and managing the operation of recreational facilities

OTHER INFORMATION

Extracurricular activities

uEducate (2018 - Present)

Minus Comm Films (2015 - Present)

Awards

uOttawa Engineering Competition 2019 (Junior Design division): 1st Place

Bio-Buddy Design Competition 2019: 3rd Place

Volunteering

Relay for Life (2016-2019)

Certifications

Driver's License G2

REFERENCES

Éloi Prévost
YMCA Coordinator
YMCA SWSE
(902) 422-2879

Jason Demers
Design and Manufacturing Advisor
John McEntyre Team Space
(613) 562-5800
jason.a.demers@gmail.com

Joshua Ching

Courses

Code	Title	Term	Grade	Units
2018, Fall				
CHM1311	PRINCIPLES OF CHEMISTRY		A-	3.00
ENG1112	TECHNICAL REPORT WRITING		A+	3.00
GNG1105	ENGINEERING MECHANICS		A-	3.00
ITI1120	INTRODUCTION TO COMPUTING I		B+	3.00
MAT1320	CALCULUS I		B+	3.00
CGPA	8			
2019, Winter				
ANP1106	HUMAN ANATOMY & PHYSIOLOGY II		B	3.00
ITI1121	INTRODUCTION TO COMPUTING II		A+	3.00
MAT1322	CALCULUS II		A-	3.00
MAT1341	INTRO. TO LINEAR ALGEBRA		A-	3.00
MCG1100	MECHANICAL ENGINEERING		A	3.00
PHY1122	FUNDAMENTALS OF PHYSICS II		A+	3.00
CGPA	8.27			
2019, Fall				
GNG1103	ENGINEERING DESIGN			3.00
MAT2322	CALCULUS III FOR ENGINEERS			3.00
MAT2384	ORDINARY DIFF EQ. & NUM. METHOD			3.00
MCG2108	MECHANICS II			3.00
MCG2130	THERMODYNAMICS I			3.00
MCG2360	ENGINEERING MATERIALS I			3.00
CGPA	8.27			
2020, Winter				
CVG2140	MECHANICS OF MATERIALS I			3.00
ELG2336	ELEC. CIR. & MACH. MECHA. ENG.			3.00
MAT1348	DISCRETE MATH FOR COMPUTING			3.00
MCG2101	INTRODUCTION TO DESIGN			3.00
MCG2131	THERMODYNAMICS II			3.00
MCG2142	BIOLOGICAL & ENG MATERIALS II			3.00
CGPA				

----- End of course list -----

Legend

Grades

10=A+ 9=A 8=A- 7=B+ 6=B 5=C+ 4=C 3=D+ 2=D 1=E 0=F

Symbols

()= Credits not granted
ADD= Additional to requirements
CTN= Continuing
DR= Dropped
EIN= Failure/Incomplete
NS= Unsatisfactory
SCO= Insufficient credits

*= Excluded from average
AUD= Auditrice/auditor
DFR= deferred
H= Honours
NC= No credit
P= Pass

ABS= Absence
CR= Credit
DNW= See: ABS
HP= Out-of-program
NNR= Not available
S= Satisfactory