John G. Willes

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https://jwilles.github.io

EDUCATION

McGill University, Montreal, Canada — 2011-2016
Bachelor of Engineering, Honours Mechanical (With Distinction)
CGPA: 3.71/4.00
Thesis: "Application of Fitts' Law for Haptic Performance Evaluation"
Key Courses: Control Systems, Optimization of Engineering Systems, Introduction to Robotics, Applied Electronics

WORK & RESEARCH EXPERIENCE

Timeplay Inc, Toronto, ON — 2017-Present
Full-Stack Developer

Center for Intelligent Machines, McGill University — 2015-2016
Research Assistant, Supervisor: Jozsef Kovecses

H. Rand GmbH, Neuhofen, Germany — 2014
Mechanical Engineering Intern

Bombardier Aerospace, Montreal, QC — 2013
Project Management Intern

Bombardier Aerospace, Montreal, QC — 2012
Mechanical Engineering Intern

EXTRA-CURRICULAR ACTIVITIES

McGill Autonomous Underwater Vehicle Design Team — 2013-2014
Pressure Vessel Team Leader

McGill Lunar Excavator Design Team — 2012-2013
Frame Team Member

SKILLS

Languages:	English, French, German
Programming:	Ruby, Python, Javascript, C, MATLAB
Frameworks & Tech:	Node.js, Angular2, Express.js, React, Ruby on Rails
Databases:	MySQL, SQLite, MongoDB
Deployment:	Amazon Web Services, Digital Ocean, Heroku
GitHub:	https://github.com/Jwilles
Software:	Maple, Simulink
CAD:	SolidWorks, Autodesk Inventor
Hardware:	General Electronics, Arduino, Raspberry Pi
Manufacturing:	Rapid Prototyping, Machining, Welding

AWARDS

McGill Faculty of Engineering Scholarship — 2012
NSERC Undergraduate Student Research Award — 2015

PUBLICATIONS

C. Gallacher, J. Willes, J. Kovecses. Parasitic effects of device coupling on haptic performance. *IEEE World Haptics Conference (WHC)*, Chicago, IL, 2015.

A. Mohebbi, C. Gallacher, J. Harrison, J. Willes, S. Achiche. Integrated Structure-Control Design Optimization of an Unmanned Quadrotor Helicopter for Object Grasping and Manipulation. *International Conference on Engineering Design (ICED)*, Vancouver, BC, 2017