# John Willes

john.willes@mail.mcgill.ca
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
Software Engineer

**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

**PROJECTS**

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

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

**SKILLS**

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|---|---|
| *Languages:* | English, French, German |
| *Programming:* | Ruby, Javascript, Python, MATLAB/Octave, C, Rust |
| *Frameworks & Tech:* | Node.js, Ruby on Rails, React |
| *Databases:* | MySQL, MongoDB, Redis |
| *Deployment:* | Amazon Web Services, Heroku, Digital Ocean |
| *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