

JOSHUA KEARNEY

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EDUCATION

B.Eng. Mechanical Engineering

Sep. 2014 – Apr. 2019

Memorial University

GPA(CGPA): 4/4 (3.56/4)

ENGINEERING EMPLOYMENT

Vehicle Software R&D Engineering Intern

General Dynamics Mission Systems

Ottawa, ON

Sep. 2018 – Dec. 2018

- Developed and implemented a military networking software for next-gen vehicle smart display computers
- Created and tested embedded Linux software, developing a system database (Xilinx/Yocto, Embedded C)
- Collaborated through an Agile development cycle using Git, Bitbucket, and Jira

Electromechanical Systems Engineering Intern

Jan. 2018 – May 2018

DuXion Motors Inc.

St. John's, NL

- Designed an electric aircraft motor cooling system that reduced the system temperature by 50%
- Developed FEA/CFD/CAD models to optimize thermal performance of a high-power density electric motor

Mechanical Engineering Intern

May 2017 – Aug. 2017

Kraken Robotics Inc.

St. John's, NL

- Designed and manufactured a proprietary underwater electronic packaging system for an AUV vehicle
- Reduced cost on AUV vehicle fins by 90% through implementing an in-house injection molding process

Armored Vehicle Testing Engineering Intern

Sep. 2016 – Dec. 2016

Rheinmetall Landsysteme Defence GmbH

Unterlüß, Germany

- Developed the electronic packaging system that protects the Puma IFV battle tanks communication network
- Environmentally tested military systems to military standard guidelines (MIL-STD-810)

Electronic Systems Engineering Intern

Jan. 2016 – May 2016

Bell Canada

May 2015 – Aug. 2015

St. John's, NL

- Designed and manufactured ruggedized electronic enclosures, installed and repaired radio board modules

ACHIEVEMENTS

Electromechanical Systems Design

Jan. 2017 – Present

Eastern Edge Robotics

- Developed distributed system control software and embedded system software for an underwater robot
- Designed and manufactured an underwater robotic vehicle chassis using CNC router
- Competed in 2017 & 2018 International MATE ROV Competitions (CA, WA), placing 5th & 8th overall

SKILLS

Programming:	Embedded C Python C++ Embedded Linux Bash MATLAB Arduino ARM/Mbed
Software:	Git Docker Xilinx/Yocto Jira/Bitbucket Unigraphics/SolidWorks Ansys PCB Design Software
Instrumentation:	Oscilloscope Multimeter 3D Printing Laser Cutting CNC Hand/Power Tools
Certifications:	Red Cross First Aid Mental Health First Aid Canadian Driver's License

EXTRACURRICULAR

Projects:	Portfolio Website Hackathon Chrome Extension Magnetically Controlled Lamp
Volunteering:	Head Coach of Competitive Swim Team Resident Assistant & Engineering Tutor
Interests:	Robotics Embedded Systems Web Dev Reading Swimming Travel
Recent Reads:	When Breath Becomes Air Gödel, Escher, Bach Mindset Snow Crash