JOSHUA P. KEARNEY

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Education

Bachelor of Mechanical Engineering (Co-op)

Sep. 2014 – Apr. 2019

Memorial University of Newfoundland

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

Employment

Vehicle Software Research and Development 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 tools such as Git, Bitbucket, Jira, and Docker

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

Robotic Vehicle Mechanical Team - 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 Team - 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

May 2015 – Aug. 2015

Bell Canada

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
- 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 **|** 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 Activities

Projects:	Portfolio Website **|** Hackathon Chrome Extension **|**Magnetically Controlled Lamp **|** Custom 3D printer
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