

# Joshua Demkiw

## Software Developer joshuademkiw.com

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**Education:** Bachelor of Applied Science, Electrical Engineering, Honours  
University of Waterloo 2012-2017 | Waterloo, ON, Canada

**Technical:**

- Low Level:** Radare2, x86, Device drivers, Reverse Engineering  
pthreads multithreading in C
- Security:** OpenSSL library encryption & hashing in C++  
Symmetric/Asymmetric encryption and decryption,  
Session Management, BeautifulSoup web scraping
- Databases:** mySQL database with Python connector
- Mobile:** Design and implementation of iOS applications to include  
barcode scanners and google maps API
- Electrical:** Fusing co-ordination, transformer and wire loading, grounding  
projects

**Experience:** **Software Developer**, Ottawa, ON, Jan 2018 – Present

- Reverse engineering and vulnerability testing using Radare2, gdb
- Multithreaded file encryption with pthreads and OpenSSL - C/C++
- Python based RSA encryption, BeautifulSoup web scraping into MySQL database

**Supply Chain**, Babcock International, Victoria, BC, Winter 2017

- Data analysis to optimize docking period repairs
- Supplier management

**Mining Engineering Intern**, Detour Gold Corp., Cochrane, ON, Fall 2016

- Mining equipment design
- Equipment database creation and design

**Engineering Intern**, Hydro Ottawa inc., Ottawa, ON, Fall 2015

- Fusing coordination for distribution level transformers/circuits
- Equipment specification grounding project involving ground plates and conductive grounding cement "SANearth"

**Junior Electrical Designer**, Canadian Nuclear Laboratories, Petawawa, ON, Winter 2014

- Designed and reviewed electrical drawings for fire safety

**Computer Engineering Intern**, BlueCoat Systems Inc. (now Symantec), Waterloo, ON, Fall 2013

- Linux based development on web filtering security system

**iOS Software Developer**, PetroBeacon Technology Ltd., Calgary, AB, Summer 2014

- Independent development of projects and features for the iOS application, including implementing a barcode scanner and Google Maps API.