2022/01/21
Canadian Coast Guard
Attn: ITS Directorate, Electronics and Informatics
25 Huron St, Victoria, BC V8V 4V9

Kevin Corbett
(250) 808 3787
kevin.corbett95@gmail.com

To the Canadian Coast Guard Electronics and Informatics Branch,

I discovered your career opportunity via Camosun College, regarding a position for an Electronics Technologist Co-op that you have available. I am reaching out as I am looking to improve my skills and gain experience in electronics. From the job description, I believe my skill set would fit very well in this position. I have always been a very detail-oriented person, and I take great pride in my work being as precise and efficient as possible. The area of work related to electrical design is really exciting for me, and these skills would provide significant value and efficiency in this position.

I am a graduate of the Electronics Engineering Technologist Diploma program from Okanagan College, and I have been employed since June 2021 as an Electronics Technician in Victoria BC. In this role I am responsible for designing and assembling AC power distribution components and control circuitry, creating and maintaining production integration documentation, as well as management and procurement of electrical-related resources. These responsibilities directly correlate with the skills you are searching for in this position. In my diploma program I focused on both AC and DC circuit analysis, along with both analog and digital communication systems and protocols. These skills are especially relevant due to the nature of the position being related to installation and maintenance of RF antennas and other radio components. I also have a significant understanding of circuit and PCB design, embedded systems and microcontroller programming, as well as Industrial Internet of Things (IIoT) system design, PLC programming, and HMI design.

I have become very confident with electronics lab equipment and power tools over the years from both my work experience as well as my education, and I find great enjoyment and satisfaction in learning new skills. I am very comfortable working in any environment, from a team-heavy collaborative setting, to a completely independent one. I would love the opportunity to learn more and grow my skill set in this position. I believe I would be a strong asset to your team and am happy to meet with you at your convenience to discuss how I can contribute to the Canadian Coast Guard.
Thank you for your consideration,
-Kevin Corbett

K E V I N C O R B E T T

CONTACT INFO: **(250) 808-3787 – Cell**
kevin.corbett95@gmail.com
407-765 Hockley Ave, Victoria BC, V9B 0Z4

SKILLS & COMPETENCIES:

- Design and assembly of AC power distribution systems
- Networking/interfacing, analog and digital communications
- General electrical/mechanical diagnostics and repair
- Analog and digital circuit analysis
- Soldering and assembly of both THT and SMT components, including microsoldering
- PCB and schematic design
- Intermediate programming in C, C++, Assembly, PLC/Ladder Logic, embedded systems and microcontrollers
- IIoT integration of existing systems, HMI design
- Strong customer service skills, supervisory and teamwork skills
- Ability to handle cash and deal with general public

PROJECT EXPERIENCE:

- **Plankton Bioreactor Control System:** Designed control and power distribution circuitry for both seaweed and microplankton bioreactor systems. Involved creating systems for significant control over sensitive biological variables, requiring in depth collaboration with biologist and mechanical engineering teams to design a system to effectively grow all life stages of macroplankton and microplankton. Significant focus placed on pH sensing and control, temperature control, biosecurity, and redundant failsafe systems in order to ensure stability of the plankton culture growth and safety of operation in hazardous industrial environments.
- **RFID based vehicle immobilizer:** Designed PCB using Altium Designer with focus on minimal physical size and power consumption. Required hand soldering of SMD components of various packages, PIC24F series microcontroller programming, consideration of vehicle safety in the event of device malfunction, and verification of features and design requirements with oscilloscope testing. 86% grade received on capstone project completed as part of diploma program.
- **Arduino based motorcycle ECU:** Implemented open-source engine controller in order to control ignition and fuel mapping for a motorcycle engine swap project. Required hand soldering of THT components on custom Arduino shield, analysis of engine timing components using oscilloscope testing, creation of custom wiring harness, and EFI tuning research to ensure compatibility of all components. Project in progress.

EDUCATION:

May 2021 **Electronics Engineering Technologist Diploma (90% overall GPA) - Okanagan College**
Apr. 2019 **1st year of Business Administration Degree - Okanagan College**

EMPLOYMENT EXPERIENCE:

Date	Title	Employer	Responsibilities
Jun. 2021 - Jan. 2023	Electronics Technologist	Industrial Plankton	Electrical assembly design, production integration documentation, management of co-op students and safety during electrical assembly
Jul. 2017 - Sept. 2020	Electronics Repair Technician	Kelowna Cell Repair	Motherboard diagnostics and micro-soldering repairs, general component replacement/repairs, customer service
Apr. 2014 - Dec. 2017	Production Manager	Artix Custom Screenprint	Production timelines, operation of industrial equipment, management of production staff
Dec. 2013 - Jan. 2014	Seasonal Sales Associate	Future Shop	Sales, customer Service, general diagnostics
Sept. 2010 - Present	Technical Support Services	Self-employed	General diagnostics and repairs of electronic and mechanical devices and vehicles

REFERENCES:

Additional references available upon request

Robert Roulston	CEO, Industrial Plankton	(250) 514-4810	robert@industrialplankton.com
Stuart de Haas	Mechanical Engineer	(250) 415-1318	stuartdehaas@gmail.com
Kevin Bradshaw	Electronic Eng. Professor, Okanagan College	(250) 762-5445 ext 4375	kbradshaw@okanagan.bc.ca
Sebastiaan Pynappels:	CEO, Kelowna Cell Repair	(250) 864-4478	info@kelownacellrepair.com