Eamon Murphy

CIVIL ENGINEERING GRADUATE

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ABOUT

I enjoy cross-disciplinary pursuits and am always striving to learn new skills to broaden my perspective. I am deeply passionate about sustainability and environmental issues and am looking for a position where I can use engineering skills to produce solutions that are technically eloquent and socially responsible. I enjoy using data driven approaches to solve complex issues. I have a good understanding of many Civil Engineering disciplines and can work in a wide variety of fields. I was born November 27th 1994, and I am in a long term cohabiting relationship with no children. I am a dual Canadian / Irish (EU) Citizen.

LANGUAGES

English - Native

French - Professional working proficiency

Spanish - Limited working proficiency

EDUCATION

I have a Bachelors of Engineering in Civil Engineering from the University of Victoria in British Columbia Canada. This program was designed from the ground up to be Canada's Greenest Civil Engineering Program and is very focused on Sustainability. As part of my degree I completed 4 co-ops or internships of 4 months each. I began my degree in September 2013 and finished August 2018. I completed an independent research project using machine learning to optimize an office HVAC system, and a Capstone or thesis project converting a Canadian Government owned remote lighthouse station to Solar and Wind power, upgrading building envelopes on site, and providing a resiliency analysis.

PROFESSIONAL EXPERIENCE

Slickspaces Technologies INC

Vancouver B.C.— Project Engineer SEPTEMBER - DECEMBER 2017

Worked with an award winning Vancouver based startup using IOT connected devices ranging from thermostats to smart locks to increase security and energy efficiency for the home rental market. Experience adapting consumer IOT technologies for commercial use within a LEED context. Worked alongside EDGE, a Vancouver based sustainability consulting company. Developed web pages using the Laravel 5.5 framework and produced font-end designs using HTML, CSS, and Vue.js.

Ministry of Community, Sport, and Cultural Development

Victoria B.C.—Infrastructure Grant Analyst January - April 2017

Created an in-depth review of a grant assessment process. Analyzed proponent responses with an emphasis on visual analytics using a self-made macro within Excel. Directed discussions with data driven suggestions on incremental improvements to grant applications. Networked with clients across the province and reviewed progress reports ensuring that funded projects were set to be completed on-time. Reviewed grants for sustainable development of municipalities across British Columbia and provided technical feedback.

Indigenous & Northern Affairs Canada

Whitehorse, YT — Capital Project Engineering Student MAY - AUGUST 2016

Worked with First Nations in the provision of safe and reliable potable water, and wastewater treatment. Experience in project management with projects in: road resurfacing, housing stock development, septic field replacements, home waste collection, riprap installation, awarding contracts, and reviewing and providing comments on technical designs of proposed water facilities. Created a GIS map for civic renumeration in a First Nation community.

SOFTWARE

I am easily able to learn new digital tools and software and enjoy coding and technical programs. I have experience with; Microsoft Word, Excel, PowerPoint, Outlook, and Project Professional 2013. Adobe Photoshop & Lightroom. OpenStudio, EnergyPlus, Sketchup, AutoCAD Civil 3D, ArcGIS, Google Earth (Pro), QGIS, SYNCRO, AutoCad Autoturn, MATLAB, R, HTML, CSS, Python, Windows batch files, Bash Scripts. Operating systems including Ubuntu (Desktop/Server), Windows XP - 10, and macOS.

PROJECTS

Machine Learning HVAC Optimization

Researching leveraging machine learning and advanced statistical methods to accurately predict future HVAC demand profiles thereby reducing HVAC energy consumption for a large office building in Victoria B.C. Using a dataset comprised of 2,100 timeseries spanning several years at sub-hourly resolution. Working with support from the Energy Systems and Sustainable Cities research team based at the University of Victoria.

University of Victoria - Civil Engineering Department Headquarters

Academic experience performing a detailed building energy analysis for the planned extension of the current Engineering and Computer Science building to house the Civil Engineering Department at the University of Victoria. Analysis was performed using OpenStudio, Energy Plus, and SketchUp. Deliverables included presenting the analysis to a board in a visually digestible manner.

Capstone Project

Academic/Industry experience working on a capstone project detailing extensive renovations to a Department of Fisheries (DFO) owned Lighthouse Station. Through a close working connection to the DFO our team produced a design which included; a resilience analysis for climate change impacts and earthquakes, a renewable power micro-grid using solar, wind, and wave energy systems, and extensive renovations to on-site residences following LEED principles. Deliverables included a final report, monthly progress updates, and a final presentation to a panel of industry judges.

EXTRACURRICULAR ACTIVITIES

Hiking

Completed various multi-day backpacking trips including, The West Coast trail and the Juan de Fuca trail (Vancouver Island), Hiking to numerous (10+) Alpine Club of Canada huts located in the Rocky Mountains, Camino of Santiago de Compostela (Northern Spain), The Grand Canyon (Arizona, U.S.A.), The Chilkoot Trail (Yukon and Alaska), Tombstone Territorial Park (Yukon), Kluane National Park and Reserve (Yukon)

Traveling

Explored many different countries and cultures including: Portugal, Spain, France, Monaco, Italy, Greece, Hungary, Slovakia, The Czech Republic, Austria, Germany, Belgium, Netherlands, Switzerland, England, Ireland, Panama, Costa Rica, Bolivia, México, Nicaragua, El Salvador, Belize, Aruba, Guatemala, The United States, Singapore, Indonesia, New Zealand, Cuba, as well extensive travel within Canada. Lived in Canada and France.

Photography

Accomplished photographer with images appearing in ELLE Canada; CBC Weather Network, Awesome Okanagan, Travel Yukon's Instagram, and several self-published photo books.

REFERENCES

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