Frank Basham

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Security Clearance: Level II (Secret)
PRI: 059 387 165

Education

BASc. Chemical Engineering Honours Co-op
University of Waterloo

Work History

Asset Management Systems Officer
Canadian Coast Guard
October 2019 – Present

- Deliver asset management training to Canadian Coast Guard personnel in the use of IBM Maximo and DMSI MAINTelligence
- Design course material/lesson plans and develop/modify curriculums pertaining to the Canadian Coast Guard's Asset Management Systems
- Lead workshops and deliver training on course design and curriculum development pertaining to the Canadian Coast Guard's Asset Management Systems
- Design and implement ad-hoc reports and SQL queries for clients needing to pull data from Maximo and MAINTelligence
- Optimize and improve current standard operating procedures and departmental workflows by integrating Python, SQL, Excel, and Maximo within the AMS section of Technical Management/Integrated Logistic Support

Logistics Analyst
NGL Supply Co. Ltd.
December 2018 – October 2019

- Self started a weekly Python programming workshop to teach beginners the fundamentals of computer science. The main focus of these workshops was on office automation. The cohort usually boasted between 5-10 employees per session and lasted for 1 hour every week. By the end of 2 months, 3 employees were using Python in their workflows on a daily basis
- Coded a Python script that uses Google OR-Tools to minimize total freight cost while maximizing product flow in our company's network. The output of this script yielded optimized routes for shipping product from supply nodes to demand nodes, saving the company ~$2M/month
- Authored numerous Python scripts to automate ETL (Extract, Tansform, Load) tasks previously done by hand/Excel macros, reducing manhours by over 20 hours/month
- Created an inventory management web application using Python/PostgreSQL for the backend and JavaScript, CSS, and HTML on the frontend. This application replaced Excel files previously updated and passed around by hand. This project enhanced transparency, version control, and accessibility of data by storing all business logic in a central location
- Coded a PDF text extractor as part of my interest in machine learning. This tool uses OpenCV as image pre-processing to remove unwanted noise, NTLK to tokenize words, and Pytesseract for Optical Character Recognition. If the PDF is already machine readable then PyPDF2 is used to extract text while Regular Expressions are implemented to extract a targeted pattern. This tool was used to automate the process of manually reading invoices, saving ~5hours/week

Marine Systems Engineering Officer
Royal Canadian Navy
May 2016 - November 2018

- Responsible for the readiness, operation, maintenance, and project management of propulsion and ancillary systems, power generation and distribution, auxiliary systems, ship's service systems, machinery control systems, hull structure, stability, damage control, and the integration of these systems
- Posted as the training officer to a cohort of 10 marine engineering technicians, electricians, and hull technicians. I taught math, chemistry, and physics in 8 week blocks. I designed my own course material, content, and final assessments with input from fleet personnel, former instructors, and department Chiefs to enhance user experience and solidify learning objectives
- Responsible for work order tracking, planned maintenance scheduling, and resource management for marine engineering assets in SAP (DRMIS)

Process Engineer
Woodbridge Foam Group
January 2011 - May 2016

- Designed, conducted, and analyzed results of randomized block statistical experiments leading to changes in the chemical formultation and standard operating procedures of polyurethane foam part production. This ultimately lead to the reduction of defective parts on the process line
- Performed equipment selection, implemented optimization regimes, and conducted process hazard analyses for quantitative risk assessments
- Planned and executed process improvement stategies using statistical process control techniques, QA monitoring, Kaizen/Six Sigma, and Process Safety Management
- Directed roots cause analyses and incident investigations into plant upsets

Skills

Python	Analysis	Showing Initiative
JavaScript	Problem Solving	Desire to Learn
Web Development	Autonomy	Creativity

Projects

Website: http://gcjobs.herokuapp.com
GitHub: https://github.com/Fbasham
Coding: https://www.codewars.com/users/Fbasham