Cole MacLean

Street • City • Postal Code

WEB http://cole-maclean.github.io • E-MAIL maclean.cole@gmail.com • CELL Number • GITHUB https://github.com/cole-maclean

SKILLS

Artificial Intelligence

MACHINE LEARNING
NEURAL NETWORKS
COMPUTER VISION
EVOLUTIONARY ALGORITHMS
COMPLEX NETWORKS
NATURAL LANGUAGE
PROCESSING

Data Science

DATA WRANGLING
EXPLORATORY DATA ANALYSIS
PREDICTIVE MODELING
DATA VISUALIZATION
STATISTICAL ANALYSIS
A/B TESTING

Programming

PYTHON

R

D3._{JS}

HTML/CSS/JAVASCRIPT

MongoDB

SQL

MATLAB

MINIZINC

PROLOG

Engineering

LEADERSHIP AND COORDINATION
COMPLEX PROBLEM SOLVING
SCIENTIFIC EXPERIMENTATION
TECHNICAL COMMUNICATION
PRAGMATIC THINKING
FUNDAMENTAL MATH AND
PHYSICS

EDUCATION

2016-2017 M.Sc. Artificial Intelligence

Polytechnic University of Catalonia

2015 Data Analyst NanoDegree

Udacity

B.Sc. Chemical Engineering

Queen's University

EXPERIENCE

2012-2016

2008-2012

PROCESS ENGINEER - CENOVUS ENERGY

Role

Onsite Technical Coordinator for oil production and pipeline equipment of a \$5B operating facility

Responsibilities

- Ensure the safe operation and design of facility assets
- Analyze process data from thousands of online sensors and meters to detect, manage and solve operational abnormalities and optimize processing equipment operation
- Facilitate the healthy communication between remote facility and corporate headquarter teams, given differing perspectives and motivations
- Design and review safety, regulatory, risk mitigation and optimization projects based on technical merit and alignment with business objectives
- Act as technical point of contact for onsite engineering support Key Successes
- Utilized advanced data analysis and signal processing techniques to locate and understand the cause of 2 major facilities upset events and mitigated the risk of similar events occurring in the future, improving facility uptime and reliability
- Designed and developed project management dashboard for visualizing facilities project backlog, schedule, execution, and risk profile, utilized by operations, engineering and project managers which reduced project turnaround times
- Conceptualized and developed program of systematic engineering reviews for process equipment that brought a mentality of continuous improvement to the facility
- Taught introductory programming with VBA to 10 colleagues

FEATURED PROJECTS

- Tesla Supercharger Network Predictive Model
- Meetup.com City Finder