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/MichelleACheung

CODING LANGUAGES & LIBRARIES

Python	
Pandas	Scikit-learn
SciPy	NumPy
matplotlib	Seaborn
BeautifulSoup	Regex
Gensim	Requests
Keras	Nltk
SQL	
Scala	

MACHINE LEARNING METHODS

Algorithms	Supervised/Unsupervised Learning
	Generalized Linear Models
	k-Nearest Neighbors
	Naïve Bayes
	Decision Trees/Random Forests
	Support Vector Machines
	K-Means
Techniques	DBSCAN
	Bayesian Statistics
	Neural Networks
	Regularization
	Feature Engineering
	Natural Language Processing
	Bagging/Boosting
	Word2Vec
	A/B Testing

LICENSES

Professional Engineer (PE)

- State of MA License No. 53905
- State of ME License No. 14073

EDUCATION

Structural Design and Construction Master’s Coursework

New Jersey Institute of Technology

BS / Civil Engineering Technology

Wentworth Institute of Technology

AWARDS

- American Society of Civil Engineers Citizen Engineer Award Recipient (2012)
- Boston Society of Civil Engineers Younger Member Award Recipient (2012)

MICHELLE CHEUNG, PE

DATA SCIENTIST | HISTORY OF DELIVERING SOLUTIONS | DEMONSTRATED DESIRE TO LEARN EXPERIENCE

General Assembly

Boston, MA

Data Science Immersive Fellow

February 2019 –May 2019

- Applied quantitative techniques and uncovered anomalies in 2017 Fiscal Year expenditures for a local Boston area municipality; Summarized and communicated processes and results to technical and non-technical audiences
- Collaborated with fellow Data Science Immersive colleagues to classify Twitter messages, working collectively under a time restraint to identify noise & signal through numerous algorithms with NLP & context research
- Conducted exploratory analysis and models to classify Reddit posts with NLP techniques TF-IDF and CountVectorizer; Evaluation included descriptive statistical methods (i.e. interpretation of Confusion Matrices and ROC Curve)
- Applied analytical concepts to predict real estate sale prices and uncover patterns in data; Feature engineering included evaluation of quantitative and qualitative features through data visualization

WSP Global

Boston, MA

Senior Structural Engineer

December 2017 – January 2019

- Managed interdisciplinary team of engineers in complex rehabilitation of MassDOT Interstate-90 Prudential Tunnel
- Worked directly with client to translate structural complications and conceive repair details for Interstate-93 under accelerated time restraints

Jacobs

Boston, MA

Structural Engineer III

June 2017 – December 2017

- Organized and documented structural details and concepts for MBTA Green Line Extension proposal package
- Devised intricate repair details for the MassDOT Central Artery Tunnel System

HNTB

Boston, MA

Structural Engineer II

March 2013 – June 2017

- Analyzed a variety of complex bridge structures for MassDOT Whittier Bridge / I-95 Improvement Project under accelerated schedule; Managed communication between CAD drafters and engineering team to ensure timely deliverables and quality drawing plans for client
- First in office to use analysis software to evaluate and design complex piers for MBTA Green Line Extension Project
- Led team of junior engineers to perform truss analysis and calculations for Tappan Zee Bridge Project
- First in office to use analysis software for movable-lift truss bridge

Greenman-Pedersen, Inc.

Wilmington, MA

Structural Engineer

January 2009 – March 2013

- Calculated foundation design for “Bridge-in-a-Backpack” in coordination with University of Maine (first “[Bridge-in-a-Backpack](#)” structure in Massachusetts)
- Led efforts in structural engineering team to standardize and ensure quality CAD standards to comply with client requirements

Beta Group, Inc.

Norwood, MA

Structural Engineer

August 2007 – December 2008

- Assisted in design of manhole structures for City of Brookline
- Calculated project cost estimates for MassDOT bridge replacement projects