Albertyn Nicolle S. Carpio

Data Scientist

Experienced Data Scientist with six years of total experience working in the Information Technology and SaaS industry. Involved in building Data Solutions to business problems, and Project Management for end-to-end project delivery.
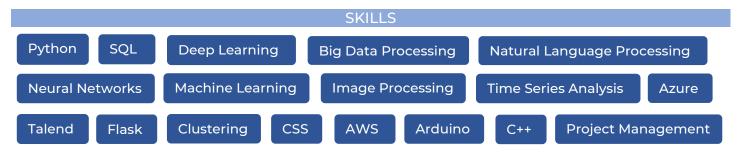
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albertyncarpio.github.io ⌂

SKILLS

Python · SQL · Deep Learning · Big Data Processing · Natural Language Processing

Neural Networks · Machine Learning · Image Processing · Time Series Analysis · Azure

Talend · Flask · Clustering · CSS · AWS · Arduino · C++ · Project Management

WORK EXPERIENCE

Data Scientist
DXC Technology
02/2019 – 03/2020

- Product Owner for a neural network IP that automates incident triage for a 98% reduction in investigation time
- Transformed and deployed the neural network IP pipeline for new, data-ready customers within a six-week timeframe
- Deployed a machine learning-enabled data processing pipeline for optimizing client contracts

Data Engineer
DXC Technology
03/2017 – 03/2020

- Built a prototype for an all-purpose data processing architecture using Python and SQL designed for centralizing disparate data sources across an organization
- Created Python-based automations for handling human resource data from MS Excel for a 90% reduction in man-hours when auditing
- Upgraded analytics tools for monitoring Business Operations using SQL and integrated through Talend
- Created a Python-based upgrade for student-record administration

Project Manager
Hewlett-Packard Enterprise
08/2016 – 03/2017

- Managed successful end-to-end deployment of multiple application enhancements and system upgrades across multiple project teams
- Enhanced customer relationships through partnership building, risk management, and communication
- Ensured all projects were compliant to ITIL Change and Release Management standards for maximum non-negative impact to client's retail business

PROJECTS

Beating the Philippine Stock Market: A Machine Learning Approach to Portfolio Management
A portfolio management application of a Random Forest Classifier. The solution achieved a +240.70% in total return, and a 31% compound annual growth rate.

Slicing through the Confusion between Good and Bad Fruit: An Application of Convolutional Neural Networks for Fruit Quality Classification
Training a convolutional neural network to distinguish fruit type and quality. The solution scored a 99% in overall accuracy, and precision and recall across twelve categories of also 99%.

Clustering Philippine Stocks based on Historical Price Movement: A Dynamic Approach to Stock Screening
Using K-Medians clustering to derive insight from stock price movements. Also employed a Markov Chain analysis to calculate the movement probabilities across clusters

Cybersecurity is Everybody's Business: Detecting and Identifying Cyberattacks through Network Traffic Data
A machine learning pipeline for detecting and classifying cyberattacks. Uses two Random Forest models, one each for detection and classification. Solution achieves 94.8% recall for detection, and a minimum of 87% recall for five out of six generalized cyberattack classes.

Identification of Twitter Sentiments based on Political Party and their Homophily during the 2020 American Presidential Elections
Using natural language processing and network analysis (homophily) to analyse the community behaviour evident on Twitter during the 2020 American elections.

Using Image Processing Techniques to Improve the Performance of Non-Neural Network Image Classification
Testing the impact of different image processing techniques on the performance of a Random Forest Classifier on identifying different (10) types of apparel. The image processing techniques improved the performance by almost 2% for accuracy, precision, recall and f1-score.

EDUCATION

MSc in Data Science
Asian Institute of Management
03/2020 – Present (ETC 06/2021)

BSc in Applied Computer Systems
Ateneo de Manila University
06/2008 – 03/2013

BSc in Applied Physics
Ateneo de Manila University
06/2008 – 03/2012

LANGUAGES

English   Filipino/ Tagalog   French   Japanese