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Victor Angelo Blancada

I am a data science and machine learning expert with a strong background in strategy consulting. I specialize in providing best possible solutions to business decision-makers using big data analytics. My technical experience across the entire data and analytics pipeline – from data engineering to machine learning to results presentation to stakeholders – covers a wide range of industries from telecommunications to marketing and advertising to supply chain management.

In my present capacity working for a global logistics and supply chain company, I am responsible for optimizing global operations by developing data-driven solutions and introducing self-service machine learning-based tools and processes that help promote the company's competitive advantage and drive strategic business growth.

As Analytics Technology Manager for a leading media conglomerate, I pioneered its global predictive modeling hub and was responsible for optimizing the media portfolios of global brands, i.e., helping clients effectively meet sales targets with customized media portfolio optimization solutions.

An experienced strategy consultant for Fortune 500 companies, I have worked with C-level clients across a variety of industries to formulate innovative data-driven solutions for their businesses, leading high-performance teams that deliver their advanced analytics requirements.

Notable projects include:
- Directing the $400MM USD network expansion of a North American telecommunications carrier by running a predictive big data simulation that leveraged a terabyte-scale database to forecast sales on the customer level and developed a detailed network plan with specifications down to last-mile connections to customer premises.
- Generating client sales lift of up to 13% by creating a large-scale media portfolio optimization program that was used across the Asia Pacific. The algorithm used was custom-built to accommodate large and complex problems such as multiple year cross-market and cross-portfolio optimization of media assets at a weekly level.
- Developing an automated flu-tracker that predicts flu incidence based on variables such as weather and search interest to help schedule marketing campaigns for cold and flu medicine. The flu-tracker was piloted across 5 markets in Australia and was subsequently rolled out to other Asia-Pacific countries.
- Successfully predicting the winning candidate in the 2016 Philippine national elections months before traditional analysis as part of a competitive analysis for a client political party. Self-developed econometric models used measured the effect of media and non-media factors on candidate popularity.
- Improving user interactions in a chat bot app for a multinational insurance company using insights from natural language processing, resulting in an active user count increase of 73%.
- Spearheading the data science and data engineering aspect of an analysis of social media user behavior over the Chinese New Year. This was published in the South China Morning Post.
- Developing the data science platform for a supply chain management company's costing center of excellence, the first of its kind in the industry, built to provide merchandisers with insights for vendor negotiation and strategic sourcing.
- Leading the creation of a global supply chain management company's cloud data lake to serve as a unified analytics platform combining warehouse, transport, labor productivity, and external data for use in dashboards, forecasting, and machine learning.
- Consolidating and optimizing the brand-level supply chains of a leading Asian food and beverage conglomerate.
- Improving the logistics efficiency of a leading multinational sportswear brand by developing an SKU-level inventory prediction system for seasonal SKUs. The system uses K-Shape clustering to combine SKUs based on the shapes of their inventory curves before fitting regression models for each cluster.
- My data science blog has been named by Abakcus.com as one of the best mathematics blogs on the Internet.

My work on natural language processing has been recognized in a competitive arena as National Finalist in the 2013 Big Data Innovation Programming Contest sponsored by Trend Micro.

I am in the 98th percentile ranking on the global Bloomberg Aptitude Test, with outstanding scores in analytical reasoning, mathematics, and economics.

I graduated summa cum laude in Industrial Engineering from the University of the Philippines, with a General Weighted Average of 1.11 (US GPA equivalent of 3.95).

Work Experience

Senior Manager, Supply Chain Analytics
Maersk Omnichannel Fulfilment (Singapore)
(Apr 2023 to Present)

- Developed self-service supply chain optimization software including applications for Supply Chain Network Design (SCND), Center of Gravity (CoG) facility location analysis, and Traveling Salesman Problem (TSP) vehicle routing optimization. These empower in-country teams to make informed strategic decisions in configuring logistics supply chains to minimize costs and reduce lead times.
- Led the creation of Omnichannel Fulfilment's cloud data lake to serve as a unified analytics platform combining warehouse, transport, labor productivity, and external data for use in dashboards, forecasting, and machine learning.
- Created Robotic Process Automation (RPA) pipelines to digitize and automate creation of documents including certificates of origin for customs processing, truck loading plans for transport, and other use cases to reduce repetitive manual work.
- Trained a deep learning language model to parse freeform customer addresses and extract relevant fields such as zip codes, building floors, provinces, and cities.
- Deployed regional transport management dashboards across Asia Pacific, allowing transport operations teams to monitor and manage real-time delivery status, truck utilization, and shipment consolidation.
- Developed data pipelines for automating greenhouse gas emission reporting for improving road transport sustainability, taking account of road distance, truck types, and vehicle loading.
- Deployed a labor management system to monitor and improve manhour productivity.
- Conducted regional supply chain network design studies for major brands in sectors including fashion, healthcare, food, and technology.

Senior Manager – Data Science, Global Supply Chain Analytics
LF Logistics (Hong Kong)
(Apr 2019 to Apr 2023)

- Responsible for building the end-to-end supply chain of the future, digitized from concept to customer, powered by data and analytics.
- Led the development of the data science platform for LF Sourcing's costing center of excellence, the first of its kind in the industry, built to provide merchandisers with insights for vendor negotiation and strategic sourcing.
- Streamlined the machine learning application development and deployment process from two months to two weeks by implementing MLOps best practices and automating continuous integration (CI), continuous delivery (CD), and continuous training (CT) for machine learning systems.
- Built regional control tower dashboard systems for Nike and Colgate Palmolive to improve real-time visibility and control over logistics operations across countries for managers and process owners both within LF Logistics and from the client.
- Created a few-shot learning SKU-level demand prediction system for Nike to improve inventory planning especially for new seasonal designs.
- Managed end-to-end data science application development from data pipeline creation, model training, to model deployment.
- Developed standard modular code libraries such as model retraining scripts and Dash graphical user interfaces that are being used in LF data science projects for various business units.
- Led the creation of a chatbot to access and summarize data from LF Logistics' warehouse management system and transportation management system.
- Built and deployed real-time interactive dashboards for use across LF Logistics such as DC (distribution center) inventory management systems and labor management systems using tools such as Plotly Dash, Tableau, Google Data Studio.
- Integrated Python forecasting models to Tableau Server using TabPy.
- Developed and conducted a Tableau training program for over 200 management LF Logistics employees to promote data literacy.
- Led the multi-temperature supply chain network consolidation of a major regional food and beverage conglomerate, resulting in 10% logistics cost reduction.
- Developed an inventory replenishment platform used by Li & Fung's supply chain management teams to manage orders for major North American retailers including The Home Depot.

Data Science & Analytics Lead – Hong Kong & Greater China
Publicis Worldwide (Hong Kong)
(Apr 2017 to April 2019)

- Managed the data science, data analytics, data engineering, and data strategy teams to partner with clients, collect requirements, define strategy, and deliver robust analytics solutions.
- Drove complex data analysis and insight across multiple client engagements while building the analytics proposition of Publicis Groupe and its agencies for Hong Kong and Macau.
- Improved user interactions in a chat bot app for a multinational insurance company using insights from natural language processing, resulting in an active user count increase of 73%.
- Developed and deployed a touchpoint attribution model to streamline customer journeys for travel and tourism customers.
- Led client engagements and internal cross-functional teams from a strategic and technical perspective. Identified new business development opportunities and established relationships with prospective clients, playing an active role in new client acquisition and new business pitches.
- Leveraged data using statistical models and machine learning techniques to lay the strategy foundation for clients that are evolving their data-driven marketing capabilities.
- Designed and implemented big data solutions both on premise and in the cloud using technologies such as Hadoop and Salesforce.
- Developed interactive data visualizations using modern methods and systems such as Tableau and D3.js web apps.
- Engineered and deployed digital analytics solutions to collect and manage user data from online platforms.
- Used advanced data analysis to optimize client digital platforms such as websites and apps.
- Partnered with the strategy department to introduce Publicis 'Newsdesk' (a real-time, data-driven marketing platform) across accounts.
- Worked with clients and third-party vendors to implement marketing technology solutions such as customer data platforms (CDP), data management platforms (DMP), and marketing automation software.

Analytics Technology Manager – Asia-Pacific
IPG Mediabrands (Philippines)
(Sep 2015 to Apr 2017)

- Responsible for the data technology framework for the Asia-Pacific region and the global predictive modeling hub.
- Generated client sales lift of up to 13% by creating a large-scale media portfolio optimization program that was used across the Asia Pacific. The algorithm used was custom-built to accommodate large and complex problems such as multiple year cross-market and cross-portfolio optimization of media assets at a weekly level.
- Applied Bayesian Markov chain Monte Carlo models to build marketing mix models for global brands including Johnson & Johnson and Coca-Cola.
- Led a team of analysts to deliver analytic responses to client strategic issues on such topics as media/marketing mix modeling, customer acquisition, cross-channel attribution, and strategic budgeting decisions, among others.
- Oversaw end-to-end management of performance analytics solutions, i.e., managing data gathering and ETL, creating analysis files, building models, running optimizations, writing presentations, and pitching to clients.
- Engaged clients and stakeholders to transform data into economic insights through statistical modeling and drive strategic thinking into actionable solutions for increased ROI.
- Acted as a key interface for clients and worked closely with account management and marketing professionals to provide ongoing analytics support and ensure projects are aligned with client business goals and strategy.
- Served as subject matter expert on advanced analytics techniques, e.g., nonlinear optimization, multivariate regression analysis, predictive modeling, logistic regression, factor analysis, sales forecasting, response prediction, advertising effectiveness, consumer profiling, market mix and ROI measurement.

Business Analyst
Mitchell Madison Group Management Consulting (Various Client Locations)
(Jun 2014 to Sep 2015)
- Assigned to work on-site on management consulting and analytics projects at client offices in North America.
- Led the Data Science Team in charge of business intelligence technology development.
- Directed the $400MM USD expansion project of a Fortune 500 company. Met with senior C-level executives to formulate the most cost-effective setup. Conducted industry research to identify potential efficiency gaps. Developed and communicated best possible solutions to strategic business issues.
- Executed top-down project work streams and strategic frameworks to identify market opportunities for a North American telecommunications carrier. Designed and leveraged terabyte scale SQL server and Neo4j databases to arrive at actionable insights and conclusions. Applied operational analytical techniques to streamline operating costs.
- Established a bottom-up predictive big data analytics model for use in market feasibility analysis for a major North American network communications provider. Conducted statistical analysis to lay down the model's mathematical framework. Developed software tools for use in the automation of the model's input collection and data processing. Leveraged operations research techniques such as graph optimization to determine the optimal scenarios.
- Generated $9MM (12% of total cost) in cost-savings for a US manufacturing company through on-site strategic sourcing and vendor contract renegotiation.

Market Intelligence Intern – Office of the Managing Director
L'Oreal Group Philippines, Inc. (Philippines)
(Apr 2013 to Jun 2013)
- For Consumer and Market Intelligence (CMI), developed a universal Customer Relationship Management (CRM) program for use across all brands under the L'Oreal umbrella in the Philippines. Conducted market research activities such as product testing and point-of-sale (POS) data analysis.
- For Media, developed an annual media plan, negotiating with media agencies and benchmarking media investments against competitor brands. Developed creative advertising campaigns on print, online, as well as out-of-home media.

Analyst
University of the Philippines-Diliman (Philippines)
Department of Industrial Engineering and Operations Research
(Mar 2010 to Apr 2014)
- Conducted a study to improve the room admissions system of a major Philippine hospital using data mining and systems simulation techniques. Developed a stochastic Markov chain model from extracted data and created a Monte Carlo simulation to predict the effect of admissions policy changes on system efficiency.

Skills

1) Data Science	11) Natural Language Processing	21) Spark	31) Hadoop
2) Machine Learning	12) Big Data	22) VB.Net	32) PowerBI
3) Artificial Intelligence	13) Computer Vision	23) D3.js	33) Market Research
4) Data Engineering	14) Python	24) Tableau	34) Shell Scripting
5) Generative AI	15) R	25) CRM	35) Microsoft Excel
6) Data Visualization	16) C++	26) GIS	36) Web Scraping
7) Operations Research	17) Java	27) Chart and Graph Analysis	37) Product Management
8) Statistics	18) SAS	28) Financial Analysis	38) Strategic Sourcing
9) Economics	19) SQL	29) HTML5	39) Project Management
10) Strategy	20) Neo4J (Graph Analytics)	30) PHP	40) Process Improvement

Selected Awards and Commendations

- 98th percentile ranking on the global Bloomberg Aptitude Test
- Summa cum laude in B.S. Industrial Engineering from the University of the Philippines, with a grade point average of 1.1 (US GPA equivalent is 3.9)
- National Champion, Operations Research Quiz Competition 2014 sponsored by the Operations Research Society of the Philippines
- National Champion, Operations Research Quiz Competition 2013 sponsored by the Operations Research Society of the Philippines
- National Champion, Industrial Engineering Quiz Competition 2013 sponsored by the Philippine Institute of Industrial Engineers
- National Finalist, 2013 Big Data Innovation Programming Contest sponsored by Trend Micro
- National Finalist, Indie Eng'g Engineering Competition 2012 sponsored by Tanging Yaman Foundation
- 2017 Tableau Visual Analytics Forum Participant
- University of the Philippines Oblation Scholar
- University Scholar
- Awardee, Ten Outstanding Students of Makati City for 2009
- High School Valedictorian, Don Bosco Technical Institute - Makati City
- Elementary Valedictorian, Don Bosco Technical Institute - Makati City

Publications

- Blancada, V. (2019, January). *AI Biases and Independent Variables*. From Data Driven Investor: https://medium.com/datadriveninvestor/ai-biases-and-independent-variables-d8bc8f6e4db5
- Blancada, V. (2019, March). *10,000 Hours, Artificial Intelligence, and the Democratization of Expertise*. From Data Driven Investor: https://medium.com/datadriveninvestor/malcolm-gladwells-10-000-hours-artificial-intelligence-and-the-democratization-of-expertise-405dd3a3fa39
- Blancada, V. (2020, September). *Logistics Center of Gravity Analysis in Python*. From Analytics Vidhya: https://medium.com/analytics-vidhya/logistics-center-of-gravity-analysis-in-python-a21ad034f84