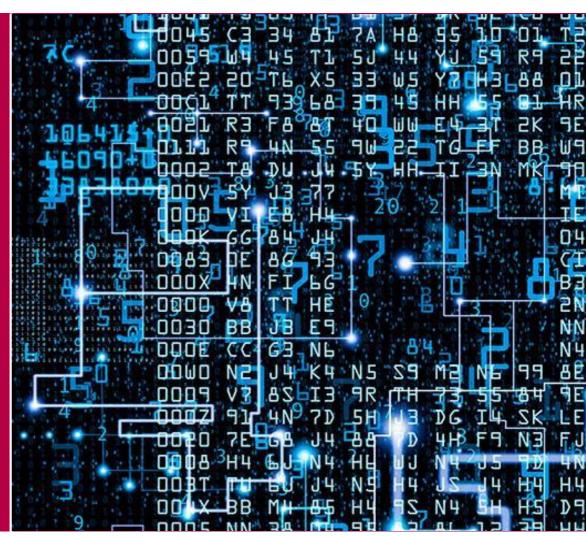


MS in Information Systems

"To fulfill my goal of becoming a global solution provider"

Written by Minseok Oh Dec, 2022

Prepared for **Santa Clara University**



Santa Clara University CONTENTS

My approach & Understanding

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To be CLEAR... Self Introduction (Personal)

✓ Understand how to collaborate and share things with each other than staying in individual happiness Experience the level of creativity allowed in Canada, I had a dream of going abroad, on a bigger stage











- ✓ Have been grateful and satisfied with all the things given to me a stable family, faith and love, and finan cial leisure that does not overflow. If I hadn't practiced sharing, such as IT Volunteer work in Ecuador and supporting students in Zimbabwe, I might have lived a very personal life. However, through such a preciou s experience, I hoped for a shared future rather than staying in individual happiness.
- ✓ When I was in Canada, I saw firsthand the degree of diversity accepted and appreciated in Canada and the level of creativity allowed. I was moved by the possibilities that an open society can bring to its members. Since then, I had a dream of going abroad, on a bigger stage. To this end, I made endless efforts, such as a Master degree program and studying English, and came to Oracle, which would become a stepping stone to my future dream. At Oracle, I had a lot of experience, such as carrying out overseas projects with global experts.
- ✓ Now is the time to take the next step toward my dream. My next destination is Santa Clara University, and I want to work at a global tech company for 3 years, understand the flow of the US and global markets, and start my own business in 5 years.



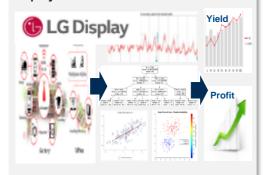


To be CLEAR... Self Introduction (Professional)

Ready to share my experiences in the field of data science, and be confident to create synergy in research activities and collaborate with colleagues at the Santa Clara University, Leavey School of Business

My expertise in Data Science field and my enthusiasm for learning

- Data Scientist (LG Display) $('13.01\sim'19.05)$
- " Provide business value by analyzing data and developing models so as to excavate insights for the front-line employees "



- Implement multiple ML/data analysis projects
- → Develop an anomaly detection model and monitoring system with ANN algorism, enabling early error detection of pixel deposition facilities (Reduced annual defect rate by 0.2%)
- ▶ Python, SAS(JMP), Spotfire, Matlab, Santa Clara Excel.

🔐 University

 KAIST Master of Science in Information Management $('16.09 \sim '19.01)$

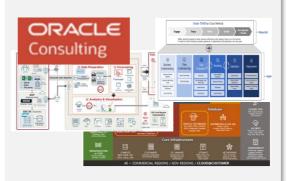
" An interdisciplinary program that combines data analysis, strategy, and management (Lectures: Business Analytics, Big data Analysis, App development, IT system Design, IT business Management) "



- · Research: Expected Values on the Continuous Intention to Use IoT Products from the Perspective of Expectation-Confirmation Theory (user, survey data)
- Data analysis & ML Projects with startup companies (Recommendation system, churn &conversion rate, target marketing, and log data analysis)
- ▶ Python, SPSS, Smart PLS, Mysql, **OracleDB**

 AI/ML & Data platform Consultant (Oracle) ('19.05~present)

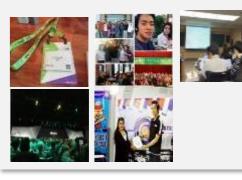
" Provide consulting services to design data architecture and develop AI/ML & Data platform to build data-driven enterprise "



- Implemented multiple AI/ML & data platform projects (Industry: pharmaceutical, distribution, manufacturing, insurance, banking)
- Engage in proof-of-concept work or product demonstration for clients to deliver data strategy and insight based on clients' requirements.
- ▶ Python, Oracle solution (OML, OAC, Data Science, Al Service)

 Enthusiasm for learning (~Continuous)

" Externally activities to improve my te chnical knowledge in Data Science and academic subjects"



External efforts:

Oracle professional training

(Analytics, Database, Cloud Infrastructure, Architecture)

Courses (Linear Algebra, Multivariate Calculus, Statistical Inference, Randomized Algorithms, Data Structure)

Conference & Volunteer work

(KORMS conference, NVIDIA GTC 2018, IT

Education volunteer(Ecuador))



To be CLEAR... My understanding of MS in Information Systems program at SCU

✓ SCU's MS in Information Systems program offers students to learn how to apply information technology to solve important challenges in business, technology, and society

SCU's MS in Information Systems Program overview

Program background

" Information systems drive business "

itself to disparate disciplines
such as construction,
education, and banking

"The speed of business is dependent on Information Systems"

Program provide

MSIS Core

MSIS Elective

Core Business

Integration: Capstone

Students graduate with

The knowledge and skills to design, build and manage the information systems

How to apply cutting-edge information technology to solve important challenges in business, technology, and society

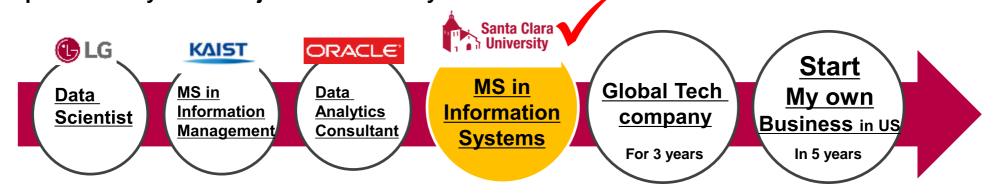
Goal: "Boost knowledge of how to apply these skills to real-world problems "





To be CLEAR... Why SCU's MS in Information Systems program? (My progress)

✓ Having a master's degree from SCU which is the best Information Systems program across the globe is a prerequisite for my future objective to start my own business



- ✓ In 2019, I decided to pursue my journey at Oracle in order to aid in preliminary work for companies in a variety of industries seeking to start data transformation. Oracle allows me to develop into a better-equipped analyst and entrepreneur. I'm able to understand different market demands by facing unmet needs by serving consulting services to multiple clients in a diversity of industries. I plan to develop my own solution for the existing numerous Small and Midsize Businesses (SMB) each with its unique set of needs. With the lessons from my career and degree program, I aspire to develop the Al/ML-based solution package that will help SMBs in their operations across the world.
- ✓ Having a master's degree from SCU which is the best Information Systems program across the globe is a prerequisite for my future objective to start my own business. I will make my partners and, expand my technical and theoretical knowledge. Also, I will have time to quench my thirst by reading and understanding various research paper ers and finding things that can be applied. Moreover, I will publish a research paper within my interest to deepen my knowledge. I'm certain that I will be able to accomplish my goals and create meaningful results by partaking in the MS in Information Systems program at SCU.





To be CLEAR... My course schedule at SCU

✓ Quench my thirst through IS, elective courses (In particular★), and capstone to fulfill my future objective Plan to take 4 semesters (48 units): IS (32 units), Business (6 units), and Integration (10 units)

	Year 1			Year 2	
Calendar	Fall	Spring	Summer	Fall	Spring
Unit	10 units	13 units	-	13 units	12 units
1	ACTG 2608:	MSIS 2604:		MSIS 2602:★	MSIS 2631: ★
	Financial and	Information		Information System	Machine learning
	Managerial	System Policy		Analysis and	
	Accounting	and Strategy		Design- System	
				Modeling	
2	MSIS 2601:	MSIS 2607:		MSIS 2627:	MSIS 2628:
	Object Oriented	Data Analytics-		Big Data Modeling	Applied Cloud
	Analysis and	Python		and Analytics	Computing
	Programming				
3	MSIS 2603:	MSIS 2645:★		MSIS 2634 :*	MSIS 2647: ★
	Database	Design Capstone1		Natural Language	Design Capstone3
	Management			Processing	
	Systems-				
	Fundamental of SQL				
4	MSIS 2613: ★	MSIS 2636 :★		MSIS 2646:★	MSIS 2606:
	Database Analysis,	Deep Learning		Design Capstone2	Software Project
	Design and				Management
	Management				
Importan	t courses for me to en	hance my knowledge a	are needed		

Curriculum				
Integration	Integration (10 units) 4 courses			
	+			
Business Core	Business (6 units) 2 courses			
	<u> </u>			
(MSIS)	Electives (16 units) 5 courses			
Information	+			
System	Core (16 units) 5 courses			
Total	48 units			

X Total of 48units is required for graduation.





To be CLEAR... My area of interest

✓ Would like to work on developing methods to promote the use of information systems related to Data Science, especially for the recommendation system, market & customer data, and social media analysis.

My interest in Data Science

- ✓ Recommendation model
- √ Time-series analysis
- √ Sales & demand forecasting
- ✓ Customer segmentation
- ✓ Anomaly detection
- ✓ Customer satisfaction prediction
- ✓ Social media analysis

Deepen my knowledge at SCU

- ✓ Explainable recommendation
- ✓ Graph-based recommendation
- ✓ Sentiment-based recommendation
- ✓ Media (cartoon, music, book) recommendation
- ✓ Relationship between social media and sales outcome
- ✓ High-dimensional Time-series analysis
- ✓ Forecasting for new launching products (Without historical data)
- Development of driver factors
 (Find out factors affecting the model's performance)
- ✓ Customer Personalization Services





To be CLEAR... Why SCU MS in Information Systems program? (My direction of study)

✓ Deeply impressed by Haibing Lu and David Zimbra's research, I would like to develop with them pricing strategies when entering a new market or analysis of the relationship between social media and sales

Based On Experiences

LG Display

Data Scientist

" Sharpened my skillset in Data Science filed "

- Validate factors by using statistical methods
- Development of prediction models and monitoring systems
 - Opportunities to analyze big data



MS in Information Management

" Broaden my standpoints in Data Science filed "

- Work with various industry startup companies
- Experience multiple types of data, recommendation system
- Publish research paper (User expectation, continuous use)
 - Understand Data-driven strategy

Oracle

AI/ML Data platform consultant

"Apply to real cases & Experience end-to-end service"

- Provide data management strategy for clients
- Implement AI/ML, data platform consulting projects (Market Basket Analysis, forecasting system, etc.)
- Understand architecture with Oracle's strong data product lineup

External efforts

Course, training

" Enhance academic & technical knowledge "

- Attend several mathematical and data coursework
- Take professional training courses and earn certificates
 - Attend academic & Global AI conference

My topic of Capstone

- Develop pricing strategies when entering a new market in complex market dynamics (Sales & price forecasting system)
- Analysis of the relationship between social media and sales fluctuations.

Desire to work with faculty at SCU



Haibing Lu

Overbooked and overlooked: machine learning and racial bias in medical appointment scheduling

→ Machine learning and optimization can be combined with a framework called predictive overbooking to significantly reduce the cost of scheduling

Investment decisions and pricing strategies of crowdfunding players

→ Study the investment decisions of crowdfunding investors and price choices of crowdfunding fundraisers in symmetric and asymmetric crowdfunding markets



David Zimbra



Movie aspects, tweet metrics, and movie revenues

→ Analyze more than 4 million tweets for 29 films of both iOS and Android users to investigate these gaps and perform robustness checks on eight other films



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