

MS in Data Analytics program

**“To fulfill my goal of becoming
a global solution provider”**

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Dec, 2022

Prepared for
SAN JOSE STATE UNIVERSITY



My approach & Understanding

1. Self Introduction (Personal)
2. Self Introduction (Professional)
3. My understanding of MS in Data Analytics program
4. Why SJSU ? (My progress)
5. My course schedule in SJSU
6. My area of interest
7. Why SJSU ? (My direction of study)

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 financial 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 precious 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 SJSU, 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.

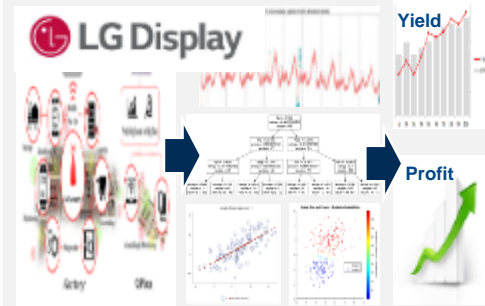
To be CLEAR... Self Introduction (Professional)

- ✓ Ready to share my experiences in the field of data science, and be confident to create synergy in academic activities and collaborate with colleagues at the San Jose State University

My expertise in Data Science field and my enthusiasm for learning

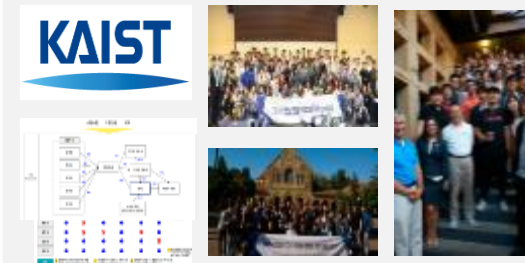
- Data Scientist (LG Display) ('13.01~'19.05)

“ Provide business value by analyzing data and developing models so as to excavate insights for the front-line employees ”



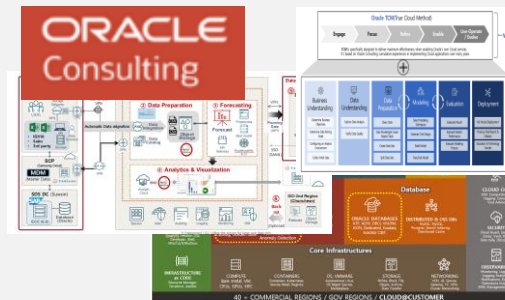
- KAIST Master of Science in Information Management ('16.09~'19.01)

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



- 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 ”



- Enthusiasm for learning (~Continuous)

“ Externally activities to improve my technical knowledge in Data Science and academic subjects “



- Implement multiple ML/data analysis projects

→ Develop an anomaly detection model and monitoring system with ANN algorithm, enabling early error detection of pixel deposition facilities. (Reduced annual defect rate by 0.2%)

► Python, SAS(JMP), Spotfire, Matlab, San José State UNIVERSITY Excel,

- 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

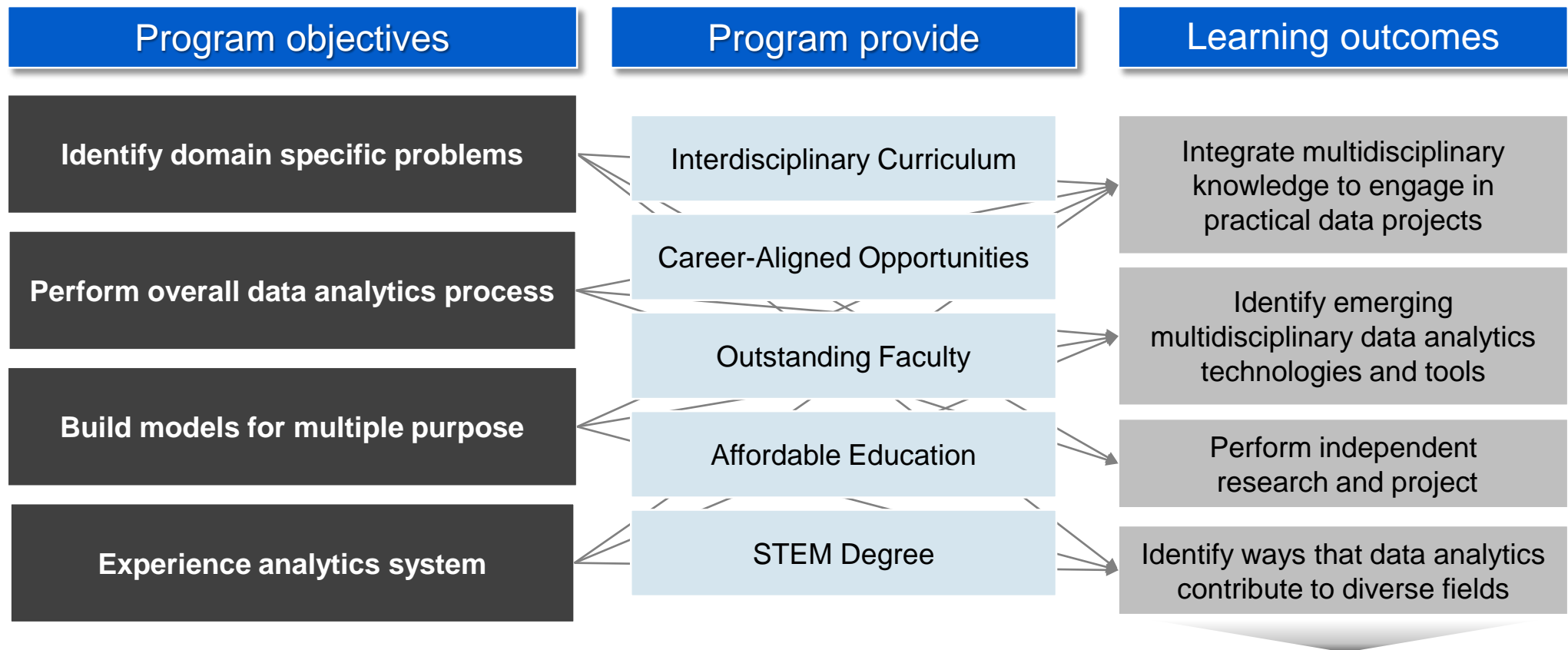
- Implemented multiple AI/ML & data platform projects (Industry: pharmaceutical, distribution, manufacturing, insurance, banking)
 - Engage in proof-of-concept work or product demonstration for clients to deliver data strategy and insight based on clients' requirements.
- Python, Oracle solution (OML,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

- 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 Data Analytics program at SJSU

- ✓ Data Analytics program offers opportunities to work with students from diverse academic and professional backgrounds and provides the advanced education to apply analytics to solve real-world problems

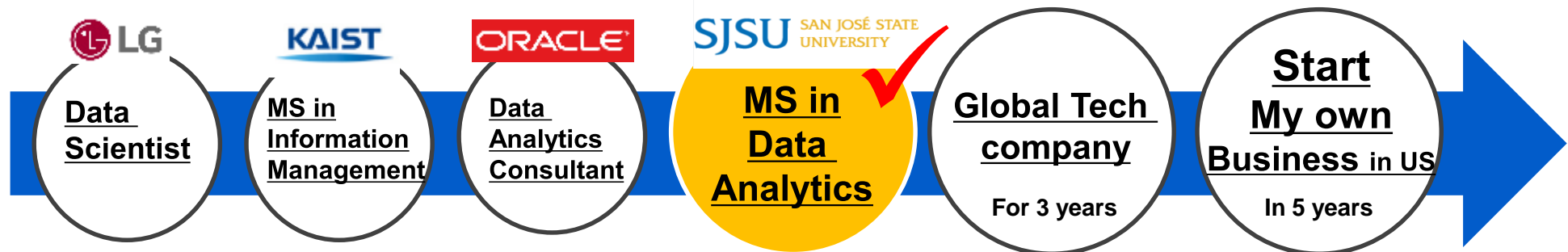
SJSU's MS in Data Analytics Program overview



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

To be CLEAR... Why SJSU MS in Data Analytics program ? (My Progress)

- ✓ Having master's degree in SJSU which is the best Data Analytics program across the globe is 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 an AI/ML-based solution package that will help SMBs in their operations across the world.
- ✓ Having a master's degree from SJSU which is the best Data Analytics 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 papers 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 Data Analytics program at SJSU.

To be CLEAR... My course schedule in SJSU

- ✓ **Quench my thirst through core, electives, and project courses (In particular★) to fulfill my future objective**
Plan to take 4 semesters (30 credits): Core (18), Electives (6), and Project (6)

	Year 1			Year 2		Curriculum	
Calendar	Fall (Sep- Dec)	Spring (Feb - May)	Summer (Jun - Aug)	Fall (Sep - Dec)	Spring (Feb - May)	Choice (Project/ Thesis)	Project Option: Data 298A,B
Unit	9 units	9 units	-	6 units	6 units		
1	Data 220: Mathematical Methods for Data Analytics	Data 240: Data Mining and Analytics		Data 255: ★ Deep Learning Technologies	Data 298B: ★ MSDA Project II		+
2	Data 225: Database Systems for Analytics	Data 228: ★ Big Data Technologies and Applications		Data 298A: ★ MSDA Project I	Data 294: ★ Data Analytics Seminar		+
3	Data 230: Data Visualization	Data 245: ★ Machine Learning Technologies				Core Courses	6 courses
						Total	30 credits

★ Important courses for me to enhance my knowledge are needed

※ 30 graduate-level units is required for graduation

To be CLEAR... My area of interest

- ✓ Would like to work on developing methods to promote the use of machine learning, especially with regard to the recommender system, customer behavior analysis, and predictive analytics.

My interest in Data Analytics

- ✓ **Recommendation model**
- ✓ Time-series analysis
- ✓ **Sales & demand forecasting**
- ✓ **Predictive analytics and modeling**
- ✓ Anomaly detection
- ✓ Customer satisfaction prediction
- ✓ Social media analysis

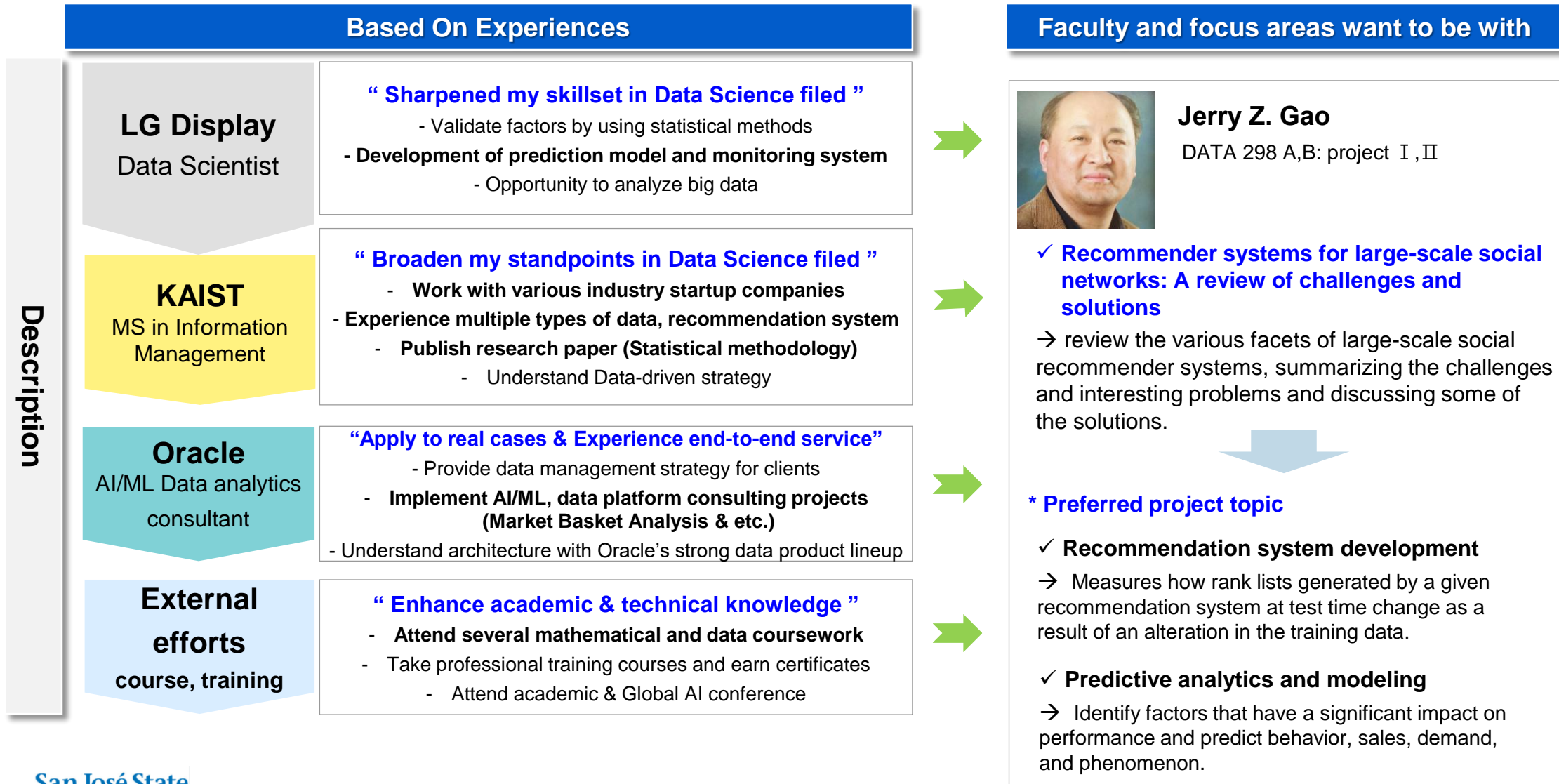


Deepen my knowledge at SJSU

- ✓ Explainable recommendation
- ✓ Graph-based recommendation
- ✓ Sentiment-based recommendation
- ✓ Media (cartoon, music, book) recommendation
- ✓ Fake review detection
- ✓ 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)
- ✓ Predictive modeling

To be CLEAR... Why SJSU MS in Data Analytics program ? (My direction of study)

- ✓ Deeply impressed by Jerry Gao's research, I would like to define and solve the issues related to the recommendation systems and prediction systems that occur in real life with his advice



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