

Master of Data Science program

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

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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 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 UCI, 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.

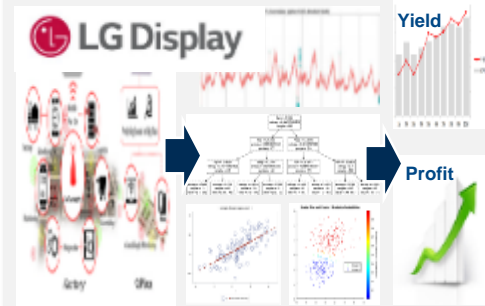
To be CLEAR... Self Introduction (Professional)

- ✓ 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 University of California Irvine

My expertise in Data Science field and my enthusiasm for learning

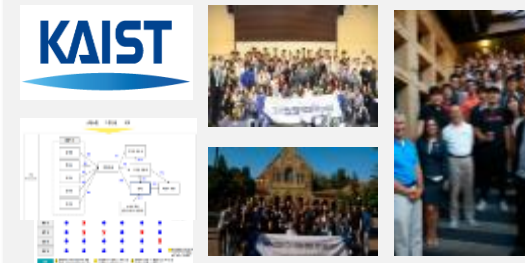
- Data Scientist (LG Display) ('13.01~'19.05)

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



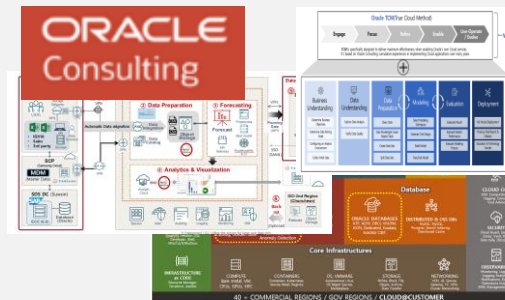
- KAIST Master of Science in Information Management ('16.09~'19.01)

“ 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 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,

UCI 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)

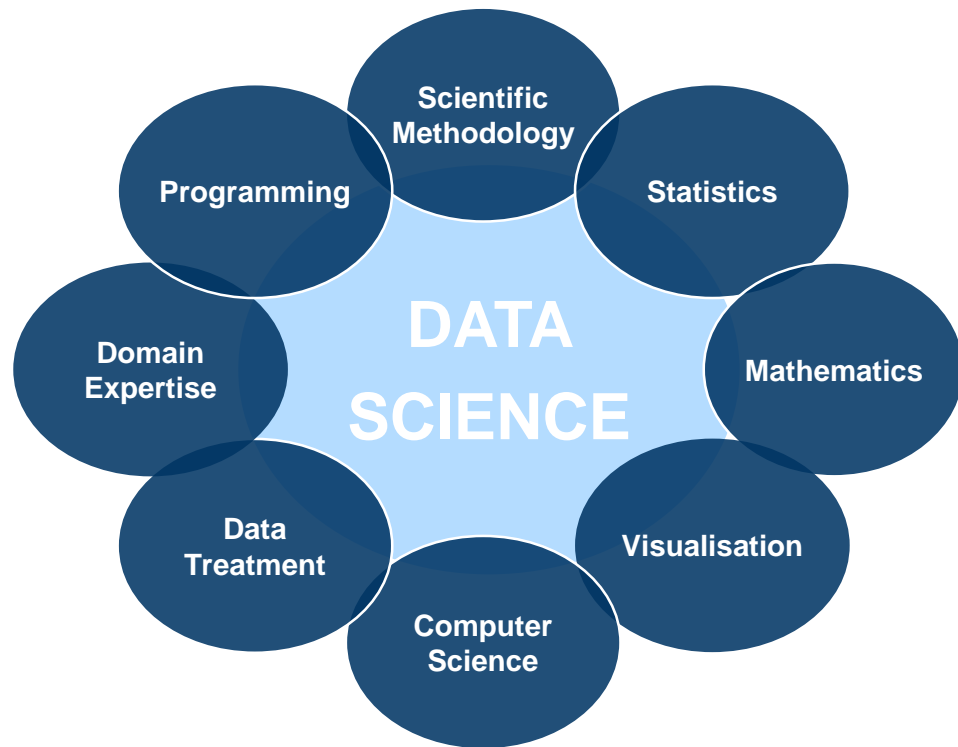
- External efforts:
Oracle professional training (Analytics, Database, Cloud Infrastructure, Architecture)
Courses (Linear Algebra, Multivariate Calculus, Statistical Inference, Randomized Algorithms, Data Structure)
Conference & Volunteer work (KORMS conference, NVIDIA GTC 2018, IT Education volunteer(Ecuador))⁴

To be CLEAR... My understanding of Master of Data Science program at UCI

- ✓ Master of Data Science program enriches students' understanding of data through a balanced curriculum and provide opportunity to work on real-life data science problems with industry partners

UCI's Master of Data Science Program overview

Coursework



Capstone Project

- ✓ Engage with industry partners to develop model to mine insights
- ✓ Provide students with the preparation in project design, development, professional writing and oral presentation to be a leader in the field
- ✓ Cover the full spectrum of the analytic process, from data gathering, manipulation, visualization, analysis, and interpretation of results

“ Designed to provide students with a strong foundation in modern data science ”

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

To be CLEAR... Why UCI Master of Data Science program ? (My Progress)

- ✓ Having master's degree in UCI which is the best Data Science 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 AI and ML-based solution packages that will help SMBs in their operations across the world.
- ✓ Having a master's degree from UCI which is the best Data Science 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 Master of Data Science program at UCI.

To be CLEAR... My course schedule in UCI

✓ **Quench my thirst through Core and Specialization coursework (In particular★) to fulfill my future objective**
Plan to take 5 quarters (52): Complete (Complete(28)+Capstone(8)), Electives (12), selection (4)

	Year 1			Year 2	
Calendar	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 5
Credit	12 credits	12 credits	12 Credits	4 credits	12 Credits
1	STATS 200AP: Intermediate Probability and Statistical Theory I	STATS 200BP: Intermediate Probability and Statistical Theory II	STATS 211P: Statistical Methods II (Modeling and Data Visualization)	DATA 298P: Curricular Practical Training	DS 296P: Capstone I★ Professional Writing and Communication for Data Science Careers
2	COMPSCI 220P: Databases and Data Management	STATS 210P: Statistical Methods I (Regression modeling strategies)	COMPSCI 260P:★ Fundamentals of Algorithms with Applications		DS 297P: Capstone II★ Design Project for Data Science
3	COMPSCI 271P: Introduction to Artificial Intelligence	COMPSCI 273P:★ Machine Learning and Data Mining	COMPSCI 274P:★ Neural Networks and Deep Learning		STATS 245P:★ Time Series Analysis
4					

★ Important courses for me to enhance my knowledge are needed

Curriculum		
Capstone Project	Capstone project	
	↑	
Selection DATA 298P or 299P	DATA298P: Curricular Practical Training	Electives: 5 courses
	↑	
Electives	Required: 2 (CS) + 1 (Statistics) Total 3 courses	
	↑	
Complete	Required: 7Complete + 2Capstone Required: 9 courses	
Total	52 credits	

※ Graduate Requirement: 52units

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 personalized system, recommender system, and customer behavior analysis.

My interest in Data Science

- ✓ **Recommendation model**
- ✓ Time-series analysis
- ✓ Sales & demand forecasting
- ✓ Customer segmentation
- ✓ **Personalized system**
- ✓ Customer satisfaction prediction
- ✓ **Social media analysis**

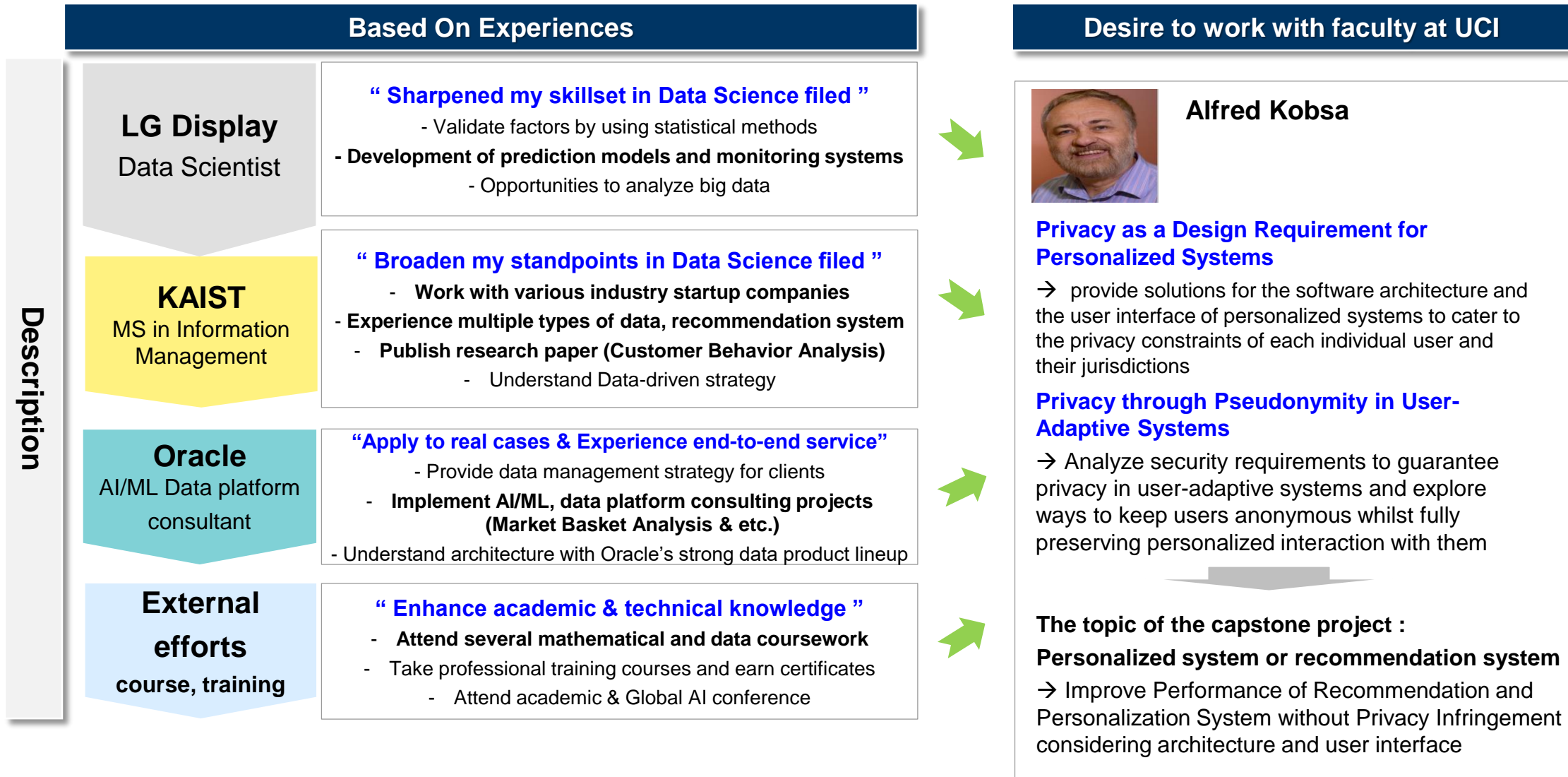


Deepen my knowledge at UCI

- ✓ Explainable recommendation
- ✓ Graph-based recommendation
- ✓ Sentiment-based recommendation
- ✓ Media (cartoon, music, book) recommendation
- ✓ Fake review detection
- ✓ Privacy for recommendation system
- ✓ High-dimensional Time-series analysis
- ✓ Forecasting for new launching products (Without historical data)
- ✓ Privacy for the personalized system

To be CLEAR... Why UCI Master of Data Science program ? (My direction of study)

- ✓ Deeply impressed by Alfred Kobsa's research, I would like to earn advice from him finding solutions for personalized systems and recommendation system to cater to privacy constraints



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