

MS in Data Analytics Engineering program

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

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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 Northeastern 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.

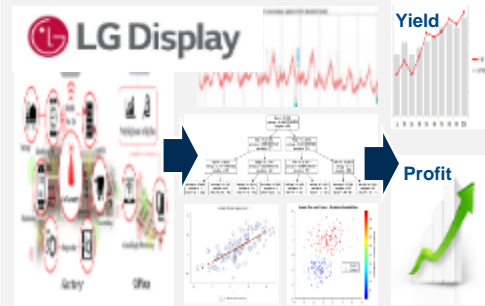
To be CLEAR... Self Introduction (Professional)

- ✓ 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 Northeastern 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 ”



- 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, Excel,

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

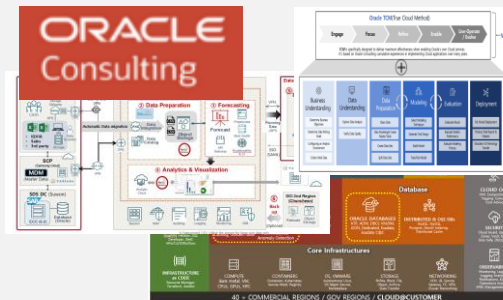
“ An interdisciplinary program that combines data analysis, strategy, and management (Lectures: Business Analytics, Big data Analysis, App development, IT system Design, IT business Management) ”



- 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, AI Service)

- Enthusiasm for learning (~Continuous)

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

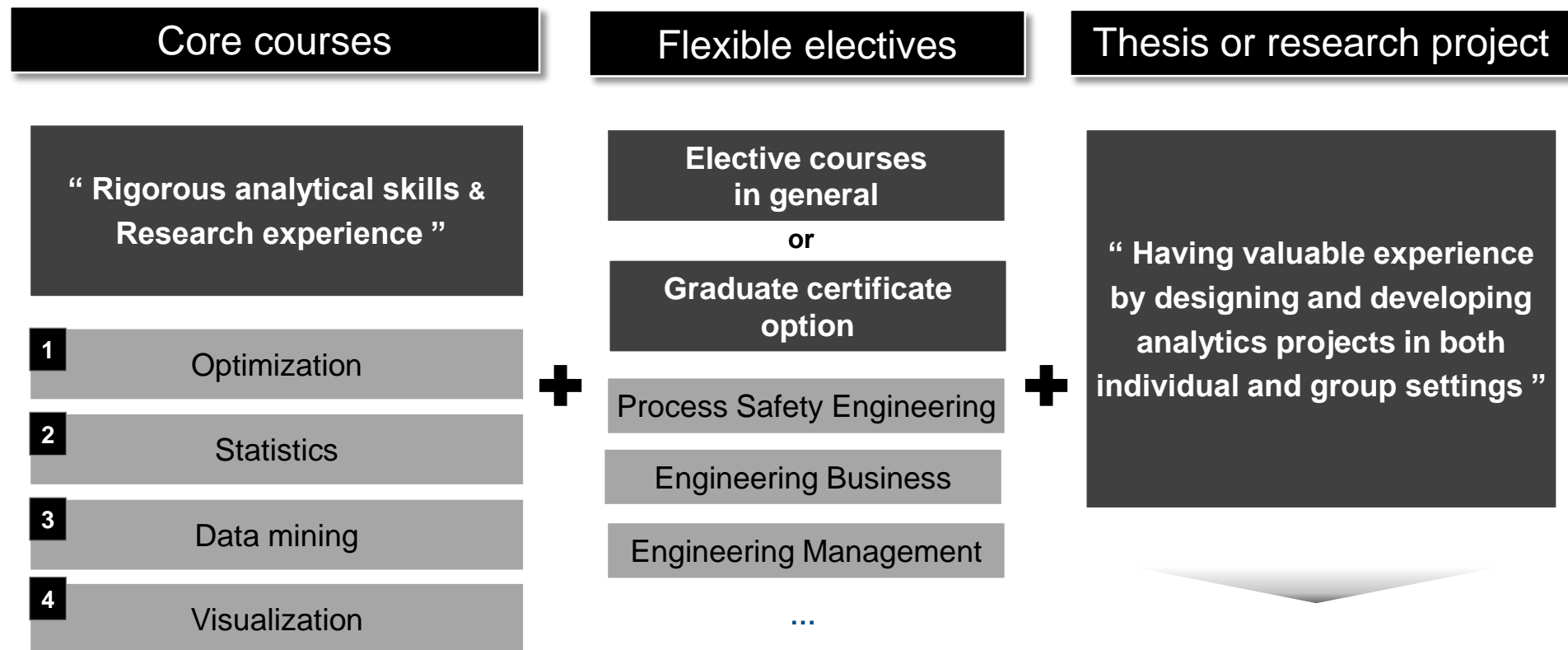


- External efforts:
- Oracle professional training (Analytics, Database, Cloud Infrastructure, Architecture)
- Courses (Linear Algebra, Multivariate Calculus, Statistical Inference, Randomized Algorithms, Data Structure)
- Conference & Volunteer work (KORMS conference, NVIDIA GTC 2018, IT Education volunteer(Ecuador))⁴

To be CLEAR... My understanding of MS in Data Analytics Engineering at Northeastern University

- ✓ MS in Data Analytics Engineering program offers knowledge and skills to develop expertise in the analysis and optimization of data to solve problems and support decision-making

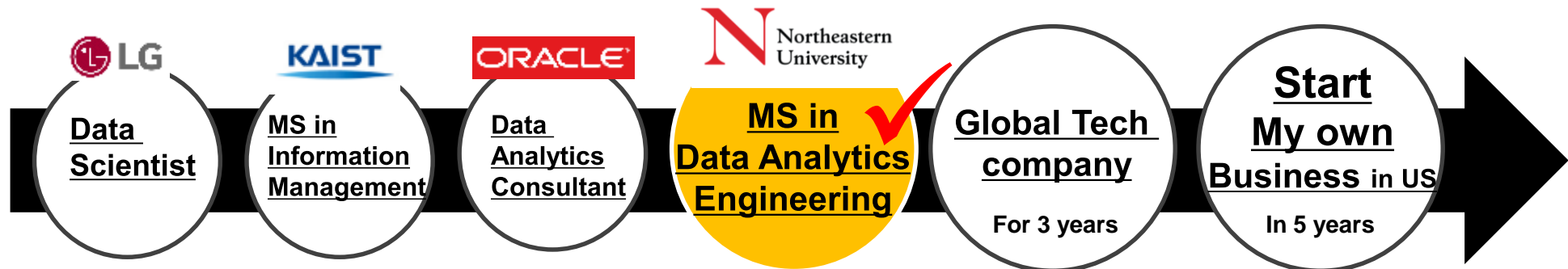
Northeastern's MS in Data Analytics Engineering program overview



Goal: "The ability to use basic engineering concepts flexibly in a variety of contexts"

To be CLEAR... Why Northeastern's MS in Data Analytics Engineering ? (My Progress)

- ✓ Having master's degree in Northeastern which is the best Data Analytics Engineering 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 Northeastern which is the best Data Analytics Engineering 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 Engineering program at Northeastern University.

To be CLEAR... My course schedule in Northeastern University

- ✓ **Quench my thirst through the core and elective courses (In particular★) to fulfill my future objective**
Plan to take 4 semesters (40 credits): Cores 16 credits, Electives 16credits, and Thesis (8)

	Year 1		Year 2		Curriculum	
Calendar	Fall	Spring	Fall	Spring	Option (Coursework, Thesis, or research)	Thesis (8 credits): Professor Babak Heydari, Mohsen Moghaddam
Credits	12 credits	12 credits	8 credits	8 credits		
1	IE 5374: Special Topics in Industrial Engineering	IE 6700: Data Management for Analytics	EMGT 5220. ★ Engineering Project Management.	INFO 7390: ★ Advances in Data Sciences and Architecture	Electives Courses	↑
2	IE 6600: Computation and Visualization for Analytics	CS 6140: ★ Machine Learning	IE 7990: Thesis	IE 7990: Thesis		
3	IE 7275: ★ Data Mining in Engineering	IE 7615: ★ Neural Networks and Deep Learning			Core Courses	↑
4						
					Total	40 credits

★ Important courses for me to enhance my knowledge are needed

※ Graduate Requirement: 32 credits

To be CLEAR... My research and area of interest

- ✓ Would like to work on developing methods to promote the use of machine learning, and understanding concepts and designs that need to be considered when developing these systems or platforms

My interest in Data Science

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



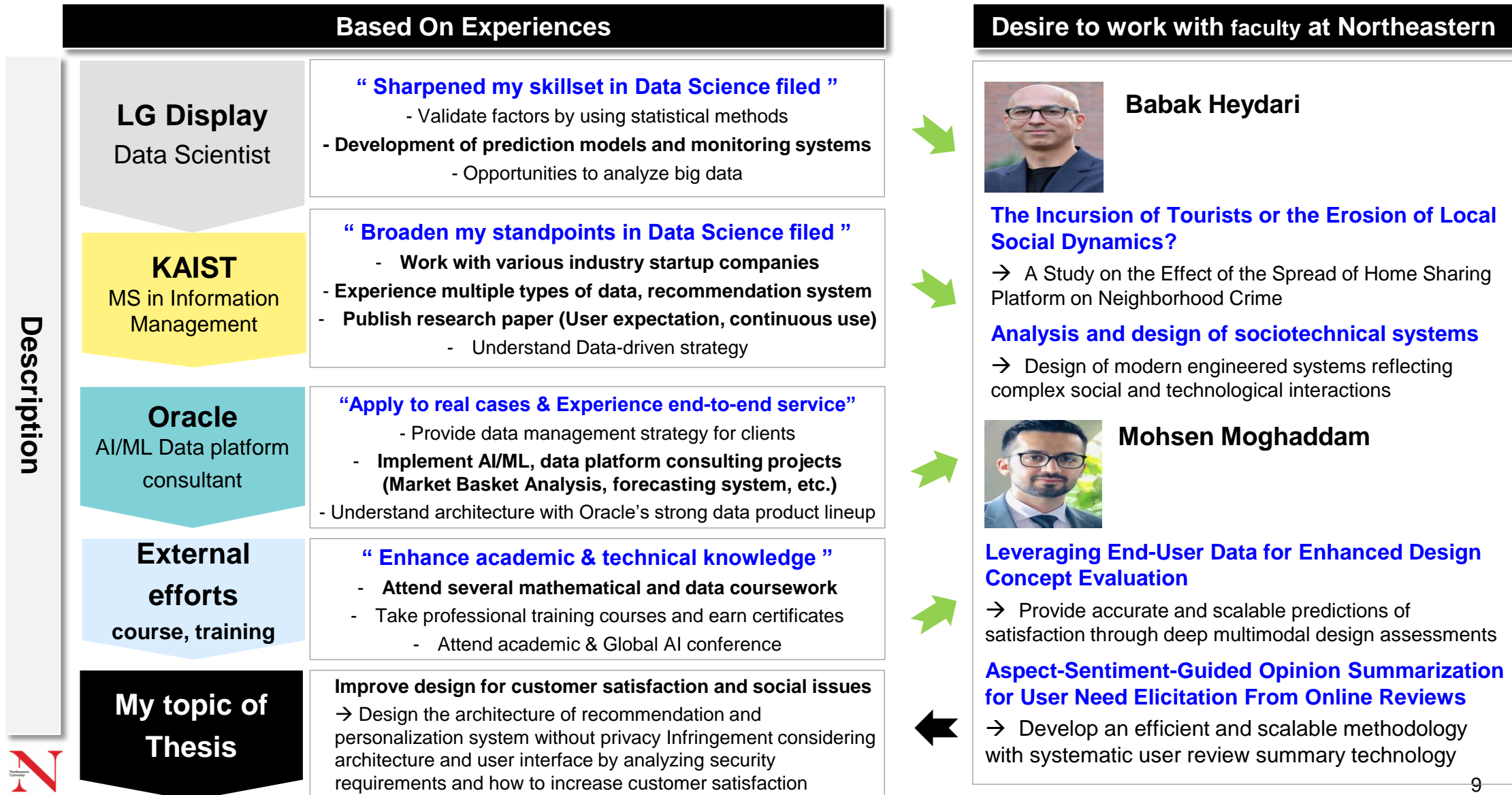
Deepen my knowledge at Northeastern

- ✓ Explainable recommendation
- ✓ Graph-based recommendation
- ✓ Sentiment-based recommendation
- ✓ Media (cartoon, music, book) recommendation
- ✓ Fake review detection
- ✓ Development of driver factors
(Find out factors affecting the model's performance)
- ✓ Continuous decision-making under uncertainty

**“ Understand concepts and designs
that need to be considered when developing
these systems or platforms ”**

To be CLEAR... Why Northeastern's MS in Data Analytics Engineering ? (My direction of research)

- ✓ Deeply impressed by Babak Heydari and Mohsen's research, I would like to research with them regarding the methods to design the system without privacy infringement considering architecture and interface



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