

Motahhareh (Moty) Moravvej-Hamedani

Ph.D. Candidate of Finance at Haskayne School of Business

MSc in Capital Market MBA (with Honor)

MSc in Computer Engineering (with Honor)

BSc in Computer Engineering

Diploma from National Organization of Development Exceptional Talents (with Honor)

Address: Department of Finance, Haskayne School of Business, University of Calgary, 2500 University Drive,

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University of Calgary Profile: https://profiles.ucalgary.ca/moty-moravvej

Member of Decentralized Finance (DeFi) Laboratory: https://haskayne.ucalgary.ca/decentralized-finance-laboratory

LinkedIn Profile: https://www.linkedin.com/in/moty-moravvej/

SUMMARY OF QUALIFICATIONS

- In-depth knowledge of technical and functional perspectives in both trade engines and multi-currency clearing and settlement systems
- In-depth knowledge of design and analysis of the systems in related fields of financial technology
- Honored to be the first woman board member of the TSETMC company in Iran's Capital Market
- Project manager of +10 domestic and international projects
- Project manager in the Iran Energy Exchange establishment
- +10 years of professional working experience in the Capital Market
- +7 years of management experience in Supervisory, Trade, Post-trade, Registry and Clearing
- + 35 Professional Lectures, Presentations and Papers in both International and Domestic events
- + 10 years of teaching and assistantship experiences
- Honored to be the first woman and the youngest director who got promoted to chief technology officer (CTO) in Iran's Capital Market after 50 years of Iran's Capital Market establishment

EDUCATION

Ph.D. Candidate of Finance

Haskayne School of Business, University of Calgary, Canada, Calgary

Supervisors: Prof. Alfred Lehar and Prof. Alex David

Master of Capital Market MBA

Iran University of Economic Science, Iran, Tehran

2016 -2018

GPA: 19.43/20

2020-Present

(Valedictorian)

- Thesis Title: Feasibility Study of Establishing Custodianship as a New Financial Pillar in Iran Capital Market
- Supervisor: Prof. Dr. Hossein Mohammadi

Master of Software Computer Engineering

University of Tehran, Iran

2009 - 2011

GPA: 18.83/20.00

- Thesis: Diffusion-based Service Discovery in Mobile Ad Hoc Networks
- Supervisor: Prof. Dr. Nasser Yazdani

Bachelor of Software for Computer Engineering

2004 - 2009

University of Tehran, Iran

GPA: 16.00/20.00 Thesis: Kernel Design for Mobile Nodes in Ad Hoc Networks

Supervisor: Prof. Dr. Nasser Yazdani

Diploma 2001 - 2004

> GPA: 19.63/20 (Valedictorian)

National Organization of Development of Exceptional Talents (NODET)

Mathematics and Physics

RESEARCH INTERESTS

- Settlement Microstructure
- Modern Banking and Payment Systems
- Market Linkage, Cross-border settlement
- Energy Markets and Smart Grids
- Fintech, Financial Technologies, Crypto Currencies, Ethereum, Blockchain, Bitcoin and DLT

PUBLICATIONS and PRESENTATIONS

Conference Proceedings:

- Lehar, A and **Moravvej, M.** (2023) "Gas Tokens: Market for Future Settlement in Ethereum Blockchain", "DBA Feedback Event at Haskayne School of Business", Calgary, Canada, Nov 28th, 2023.
- Lehar, A and **Moravvej, M.** (2023) "Private Settlement in Blockchain Systems", "Networks in Modern Financial and Payments Systems", Ottawa, Canada, June 14-15, 2023.
- Lehar, A and **Moravvej, M.** (2023) "Private Settlement in Blockchain Systems", "The University of California Santa Barbara", UCSB-ECON DeFi Seminar, USA, March 17, 2023.
- Lashkaripour, M and **Moravvej, M.** (2023) "Crypto-CAPM: The role of speculative and fundamental demand in crypto pricing", "AFA: American Finance Association", New Orleans, USA, January 6-8, 2023.
- Lehar, A and **Moravvej, M.** (2022) "Private Settlement in Blockchain Systems", "Bonn Workshop on Digital Currencies", Bonn, Germany, December 19, 2022.
- Lehar, A and **Moravvej, M.** (2022) "Private Settlement in Blockchain Systems", "Finance December Meetings", Paris, France, December 15, 2022.
- Lehar, A and **Moravvej, M.** (2022) "Private Settlement in Blockchain Systems", "17th Central Bank Conference on the Microstructure of Financial Markets", Sydney, Australia NSW, December 8-9, 2022.
- Lashkaripour, M and **Moravvej, M.** (2022) "Crypto-CAPM: The role of speculative and fundamental demand in crypto pricing", "Cardiff Fintech Conference", Cardiff, Wales, UK, October 12, 2022.
- Lehar, A and **Moravvej, M.** (2022) "Private Settlement in Blockchain Systems", "Cardiff Fintech Conference", Cardiff, Wales, UK, October 12, 2022.
- Lehar, A and **Moravvej, M.** (2022) "Private Settlement in Blockchain Systems", "Economics of Financial Technology Conference", Edinburgh, Scotland, May 11-13, 2022.
- Lehar, A and **Moravvej, M.** (2022) "Private Settlement in Blockchain Systems", "4th Future of Financial Information Conference", Stockholm, Sweden, May 18-20, 2022.
- Lashkaripour, M and **Moravvej, M.** (2022) "Crypto-CAPM: How does optimism derive price fluctuations in cryptocurrencies?", "2022 SKKU International Conference", Seoul, South Korea, Virtual attendance, May 12-13, 2022.
- Moravvej, M. and Mohammadi, H. (2017) "Custody as a New Financial Pillar in Iran Capital", Proceeding of 8th Conference on Development of Investment and Financing system in Iran, Tehran, Iran, February 12-13, 2017, 18pp.
- Moravvej, M. (2018) "Survey about How to Ease Connections in Supply Chain with Use of Automatic Service Discovery," Proceeding of 1st International Conference on Modern Approaches in Engineering Sciences (ICMAES 2018), Georgia, Tbilisi, November 21, 2018.
- Moravvej, M. and Morsali, F. (2015) "Smoothing Merger and Acquisition Process from System Design Perspective," Proceeding of 1st Conference of Merger and Acquisition in Iran, Tehran, Iran, February 16-17, 2015, 16pp.
- Siahkarzadeh, S., **Moravvej, M.**, Khodabakhsh, M., (2014) "SPS2D(S2F) as Simulator for a Novel Approach on Single Stock Futures Margin Calculation in Iran Capital Market", Proceeding of Risk Management and Financial Engineering Conference, Tehran, Iran, February 24, 2014, 7pp.

Other Presentations:

- Moravvej, M. "Market Linkage; A Revolutionary Phase from Definition to Service Provision in Isolated Capital Markets", Presented in GSRS2020 Symposium, Calgary, Canada, March 2020.
- **Moravvej, M.** and Hamooni A. "Steps toward opening up Iran's Capital Market to Fintech Ecosystem", Presented in Asian IFN Forum REDmoney Event, Kish Island, Iran, October 2018.
- Moravvej, M., "A Detailed look at Iran's Clearing and Settlement System and Related Processes", Presented in the 2nd Joint workshop between SEO and Cinnober on Design and Development of Trade System and Real-time Clearing, Stockholm, Sweden, June 2017.
- Moravvej, M., "Pre and Post Trade Activities", Member of the Panel Discussion in the First Foreign Investments Roadshow after JCPOA, Muscat, Oman, December 2016.
- Moravvej, M., "The Proposed Model of Market Linkage an Abstract view", Presented in the Third Joint workshop between South Korea and Iran on Market projects, Seoul, South Korea, May 2015.
- Moravvej, M., "A Lightweight Business Continuity and Disaster Recovery Plan", Presented in ACG 16th Cross Training Seminar, Tehran, Iran, May 2014.
- Moravvej, M., Mohammadi, M., (2019) "Kernel Design for Mobile Nodes in Ad Hoc Networks", Accepted in the 4th International Conference on Research in Science & Engineering & International Congress on Civil, Architecture and Urbanism in Asia, Thailand, Bangkok, March 19, 2019, 8pp.
- Moravvej, M., Mohammadi, M., Yazdani, N. (2019) "Assessment of Different Service Discovery Protocols on Mobile Ad Hoc Networks", Accepted in the 4th International Conference on Research in Science & Engineering & International Congress on Civil, Architecture and Urbanism in Asia, Thailand, Bangkok, March 19, 2019, 14pp.
- Moravvej, M. (2018) "Design of Connected Micro Grid to the Local Distribution Network," Proceeding of the 1st International Conference on Modern Approaches in Engineering Sciences (ICMAES 2018), Georgio, Tbilisi, November 21, 2018, 21pp.
- Moravvej, M. (2011) "Application of Particle Swarm Optimization in Oil Demand Estimation," Proceeding of the 5th International Symposium on Advances in Science & Technology (SASTech), Mashhad, Iran, February 16-17, 2011, 8pp.

Journal Articles, Papers and Books:

- Moravvej, M., (2017) "Steps toward Pre-Trade to Post Trade," 1st Journal of CSDI accumulative papers, Iran, Tehran, April 2017, Vol 1(1):377-390.
- Moravvej, M., (2015) "An Introduction to the New Registry System," Monthly Journal of Exchange, Iran, Tehran, November 2015, Vol 121:22-35.
- Moravvej, M., (2015) "E-Voting and E-General Assembly Establishment from Technical and Business Perspective," Monthly Journal of Exchange, Iran, Tehran, September 2015, Vol 124:10-21.
- Moravvej, M., (2018) "Study of Establishing Custody as a New Financial Pillar in Iran Capital Market A Comparative Approach," Submitted to the International Journal of Management, November 2018.
- Moravvej, M. (2018) "Mobility Models and Middleware Support for Mobile Ad Hoc Networks," International Journal of Innovative Research in Engineering Sciences, Vol. 4(3): 99-104.
- Moravvej, M., Mohammadi, M., Yazdani, N., (2019) "Modelling Service Advertisement Protocol Based on Diffusion Phenomenon in Mobile Wireless Ad Hoc Networks," Submitted to the Journal of Innovative Research in Engineering Sciences, January 2019.
- Najjari, F, **Moravvej, M.** (2019) "A Novel Framework for Evaluating Performance of Software Engineers in the Platform of Agile Software," International Congress on Science and Engineering (TUICET 2019), Japan, Tokyo, November 17th, 2019.

HONORS and AWARDS

- FGS Doctoral Scholarship Award 2023, \$ 15,000 December 2023.
- GSA Quality Money Project Award 2023 \$800 August 2023.
- Alberta Innovates Graduate Student Scholarship 2021 and 2022 –\$31,000 per year September 2021.
- Marion Janet & Ian Stormont Forbes Graduate Scholarships 1 year for \$18,000 September 2021.
- Eyes High International Doctoral Scholarship 1 year for \$15,000 September 2021.
- Alberta Graduate Excellence Scholarship (AGES) International Students 1 year for \$15,000 July 2020
- Pre-candidacy Award for University of Calgary \$400 June 2020
- Graduate Students' Association Bursary \$1,000 February 2020
- Ranked First in the MBA Capital Market entrance exam with 80% fund support for the top 3
- Ranked 256th in B.Sc. level nationwide university entrance exam full fund
- Ranked 96th in M.Sc. level nationwide university entrance exam full fund
- Ranked 3rd in Ph.D. level national university entrance exam full fund
- Ranked 1st in B.Sc. level national Azad university entrance exam with 100% fund support.

PROFESSIONAL EXPERIENCE

Fintech Sessional Instructor

September 2023- Present

Calgary, Canada

FNCE481 – L01/L02

Graduate Research Assistant

January 2020 - Present

Calgary, Canada

- Haskayne School of Business, University of Calgary
 Assistant to Prof. Alfred Lehar
- Assistant to Prof. Alexander David

Business Analyst and IT Consultant to the CEO

Haskayne School of Business, University of Calgary

OCT 2019 - December 2019

Kian Capital Company

Tehran, Iran

Financial Instrument Design, Custodian Services, Product Design, SEBA Team Representative

IT Consultant and Project Manager

June 2019– October 2019

Kian Digital Company

Tehran, Iran

Providing algorithmic trading platforms, Online Trading, Exchangeable Traded Fund (ETF) and Mutual Funds (MFR)
 Trading Platforms

Chief Technology Officer

January 2018 – April 2019

Securities and Exchange Organization of Iran (SEO)

Tehran, Iran

- Define Strategies for the IT infrastructure of the Capital Market in a Harmonious Manner Covering both Technical and Business Requirements as well as Supervising the IT Sector
- Collaborative Working with +40 direct IT Experts in my department and +2 IT Subsidiaries companies and +4
 Exchange Organizations and +10 IT Provider Firms, and +108 Brokerage Houses

Advisor to Deputy of Executive Affairs

March 2017 – January 2018

Securities and Exchange Organization of Iran (SEO)

Tehran, Iran

- Standardizing Iran's Capital Market Supervisory Practices
- Upgrading the Trade Engine System
- Design, Development and Establishment of an International Surveillance System

Research and Development Director

May 2016 - March 2017

Central Securities Depository of Iran (CSDI)

Tehran, Iran

- International Market Linkage Project and Collaborating with All Parties Involved, such as Exchanges, Brokerage Houses, Regulatory Bodies and Banks
- Defining the Process of Regulating Custodians in Iran Capital Market for the First Time
- Establishment of the System Related to the Iran Energy Exchange for Electricity

Issuers' Affairs DirectorJanuary 2012 – May 2016

Central Securities Depository of Iran (CSDI)

Tehran, Iran

- Detailed Design and Establishment of Issuers' Value-Added Services
- Modelling and Analyzing the Hybrid Registry System Under Different Conditions by Conceptual Models
- Administration of Clearing and Settlement, Registry for Both Security and Electricity Systems and Corporate Actions

CEO IT Consultant January 2011 – January 2012

Central Securities Depository of Iran (CSDI)

Tehran, Iran

- Lunching the Rule-Based Clearing and Settlement System by Revising the Underling Processes
- Dematerialization in Iran Capital Market for 100% and Providing Value Added Services and Systems

TEACHING RELATED EXPERIENCE (Instructing and Assistantship)	
FinTech (FNCE481 L01/L02)	September 2023
University of Calgary, Haskayne School of Business, Calgary, Canada	
Quality Management and Productivity – <u>Instructor</u>	Winter 2016
The Islamic Azad University, Tehran, Iran	
Principals of Computer Programming- Instructor	Spring 2013
Alzahra University, Tehran, Iran	
	Winter 2021
Financial Risk Management (FNCE667) – MBA Level – Teaching and Grading Assistant	Winter 2023
<u>Holding Tutorial Sessions</u> - Dr. Alexander David at The University of Calgary, Haskayne School	
of Business, Calgary, Canada	
Managerial Finance (FNCE601) – MBA Level – <u>Teaching and Grading Assistant, Holding</u>	Winter 2022
<u>Tutorial Sessions</u> – Dr. Alfred Lehar at The University of Calgary, Haskayne School of Business,	
Calgary, Canada	
Security Analysis and Investments (FNCE443) – Undergrad Level – Teaching and Grading	Fall 2022
Assistant, Holding Tutorial Sessions - Dr. Alexander David at The University of Calgary,	
Haskayne School of Business, Calgary, Canada	- II 000 t
Managerial Finance (FNCE601) – MBA Level – <u>Teaching and Grading Assistant, Holding Tutorial</u>	Fall 2021
Sessions - Dr Alfred Lehar at The University of Calgary, Haskayne School of Business, Calgary,	
Canada	W
Financial Risk Management (FNCE667) – MBA Level – <u>Teaching and Grading Assistant Holding</u> The right Sessions. By Alexander Parid at The University of Colorest Health are School of Pusiness.	Winter 2021
<u>Tutorial Sessions</u> - Dr Alexander David at The University of Calgary, Haskayne School of Business,	
Calgary, Canada Financial Technology (FNCF621) MRA Level Teaching Assistant to Dr. Alfred Lohar	Fall 2020
Financial Technology (FNCE631) – MBA Level - <u>Teaching Assistant</u> to Dr. Alfred Lehar The University of Calgary, Haskayne School of Business, Main Campus, Calgary, Canada	Fall 2020
Financial Technology (FNCE481) – Undergrad Level - Teaching Assistant to Dr. Alfred Lehar	Fall 2020
The University of Calgary, Haskayne School of Business, Main Campus, Calgary, Canada	1 all 2020
The offiversity of Calgary, Haskaytie School of Business, Main Campus, Calgary, Canada	
Simulation and Data Analysis in Finance – <u>Teaching Assistant</u>	Summer 2012
The Allameh Tabataba'i University, Tehran, Iran	341111161 2012
Advanced Operating System – <u>Teaching Assistant</u>	Spring 2010, 2012
The University of Tehran, Electrical and Computer Engineering (ECE), Tehran, Iran	-10
Operating System Laboratory – Teaching Assistant	Fall 2010
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The University of Tehran, Electrical and Computer Engineering (ECE), Tehran, Iran

Computer Networks – Teaching Assistant

The University of Tehran, Electrical and Computer Engineering (ECE), Tehran, Iran

Database Laboratory – Teaching Assistant

The University of Tehran, Electrical and Computer Engineering (ECE), Tehran, Iran

Operating System – Teaching Assistant

The University of Tehran, Electrical and Computer Engineering (ECE), Tehran, Iran

Software Engineering 1 – Teaching Assistant

The University of Tehran, Electrical and Computer Engineering (ECE), Tehran, Iran

File Structure – Teaching Assistant

Fall 2006

The University of Tehran, Electrical and Computer Engineering (ECE), Tehran, Iran

CERTIFICATES

•	International Student Mentor Badge	4 th January 2024
•	The51 Financial Feminist Member Badge	28 th June 2023
•	Instructional Skills Workshop	11 th May 2023
•	Cryptocurrency Regulation: How Should Practitioners and Policymakers React? (California MCLE)	8 th February 2023
•	Smart Money Financial Literacy Badge	1 st April 2022
•	Taylor Institute Developing Teaching Dossier Badge for Graduate Students	17 th of June 2020
•	Mentoring Certificate in FINSTARS	16 th of April 2018
•	Iran Islamic Finance Forum	23 rd of October 2018
•	Future Contracts from the Executive Perspective	2 nd of December 2017
•	Market Microstructures	25 th of November 2017
•	Securities Industry Essentials	26 th of September 2017
•	Capital Market Analysis	26 th of September 2017
•	Financial Institutions Management	26 th of September 2017
•	Initial Public Offering Specialist	26 th of September 2017
•	Machine Learning and Deep Learning	2 nd of May 2017
•	Mentoring Certificate in FINSTARS	15 th of April 2017
•	Educational and Practical Certificate in Anti Money Laundering	4th of January 2017

VOLUNTEER and LEADERSHIP ACTIVITIES

•	Finance Circle Graduate Students Research Gathering Organizer, Haskayne	September 2023 - Present
•	Calgary Public Library Fintech Concepts Teaching Lead for ESL Newcomers	September 2023 - Present
•	Mentor for the International Student Mentorship Program (ISMP)	June 2023 - Present
•	Finance, IT and Blockchain online teaching volunteer for Afghan Girls (Wisdom House) Executive Member at the Iranian Newcomers Helping Center during COVID-19 (Yara	January 2023 – Present
	group)	November 2020 –2022
•	Graduate Student's Association (GSA) Award Committee Member	August 2020 – September 2021
•	Persian Golf Charity Financial Committee Executive Member	July 2020 - 2022
•	Non-medical Mask Distribution Volunteer for the University of Calgary	August 2020- 2 Shifts
•	COVID-19 Volunteer for Community Affections Letter Writing	June 2020 - August 2020
•	Executive Member at Doctoral Association for Students of Haskayne (DASH)	May 2020 – September 2021
•	GRC Graduate Representative Council COVID-19 Virtual Supporter Volunteer at the University of Calgary	May 2020 – September 2021 April 2020 - August 2020
•	Mentoring for Fintech Symposium at Iran Financial Center	May 2020 - June 2020