Niloofar Zamani Foroushani

PhD candidate in Operations
Department of Analytics, Marketing and Operations
Imperial College Business School

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Education:

Jul. 2021-present — Ph.D. in **Operation and Analytics, Imperial College Business school**

Jul. 2021 — Master in Research in **Operations and Analytics, Imperial College Business School**
Thesis: 'Optimal recurrence surveillance for cancer patients post-treatment: the case of head and neck cancer'
Supervisor: Dr. Reza Skandari
GPA: **85.45/100.00**

Jun. 2020 — Master of Science in **Industrial Engineering, System Optimization**
Sharif University of Technology
Thesis: 'A Novel Cloud Manufacturing Service Composition Model for Realizing the Supply Chain Resilience Structure'
Supervisor: Dr. Omid Fatahi Valilai
GPA: **4.00/4.00**

Jun. 2018 — Bachelor of Science in **Industrial Engineering**
Sharif University of Technology
Thesis: 'Analyzing OR Models Under Uncertainty for Routing Problem'
Supervisor: Dr. Omid Fatahi Valilai
GPA: **3.84/4.00**

Jun. 2014 — Diploma in **Physics and Mathematics**
NODET (National Organization for Developing Exceptional Talents)
GPA: **19.8/20 (4.00/4.00)**

Awards and Honors:

Aug. 2021 — Selected for **Imperial College Business School Dean's List for academic excellence** in the cohort of Master of Research 2020/21

Aug. 2021 — Received Imperial College Business School MRes Business **Project prize**

Aug. 2018 — Received **Straight M.Sc. Admission Offer** to the Sharif University of Technology Due to High GPA

Sep. 2017 — **Ranked 7th Among 78** Undergraduate Students of Industrial Engineering in Sharif University of Technology

Aug. 2014 — **Ranked Among top 0.2 percent** in the Nationwide University Entrance Exam (Konkur)

Research Interests:

*Operation Research
*Dynamic Programming
*Stochastic Programming
*Cloud Manufacturing Supply Chain
*Robust Optimization
*Data Analysis and Data Driven Modeling
*Queuing Theory

Teaching Experience:

Teaching Assistant - *Computer Information Systems*
Instructor: Dr. Samira Sadeghi

Teaching Assistant - *Stochastic Programming*
Instructor: Dr. Majid Rafiee

Work Experience:

Aug. 2018 - Mar. 2019	**Counselor** of Data Analysis, at Arya Sasol Co. Tehran, Iran
Jun. 2019 - Jun. 2020	Member of Head Council of Scientific Association of Industrial Eng. Dept., Sharif University of Technology, Tehran, Iran
Jun. 2017 - Jun. 2018	**Head Member** of Scientific Association of Industrial Eng. Dept., Sharif University of Technology, Tehran, Iran
Feb. 2017 - July. 2017	**Head Member** of the Content Team for GameIn 2017(the First National Game on SCM for Industrial Engineers in Iran)
Jun. 2017 - Aug. 2017	**Internship** in Paresh Co. Tehran, Iran (240 hours)

Projects:

Cost-Utility Analysis of Oral Peanut Immunotherapy Compared to Peanut Avoidance Using excel
Health Economics
Developing a Markov model, Gathering data, Estimating costs, Performing cost-utility analysis, Measuring cost-effectiveness, performing sensitivity analysis.

Analyzing Teenage Suicide Using R
Healthcare and Medical Analytics
Working with 'Add Health' A self-reported nationwide longitudinal study in USA database, Finding related factors, Extracting related data from the database, Descriptive Analysis, Predictive Analysis

ICU Mortality Prediction Using R and SQL
Healthcare and Medical Analytics
Accessing MIMIC database, Finding factors, Querying database, Descriptive analysis, Predictive analysis

Market Basket Analysis and Assortment Optimization Using Python and Matlab
Data Driven Modeling course
Cleansing sales data, Clustering items by their description, Finding association rules, Optimizing assortment of a warehouse according to association rules

Profit Maximization of a Company with Stochastic Demand Using Matlab
Stochastic Programing course
Optimizing a 2-stage problem with multi-cut L-Shape method

Analyzing Dynamics of Water Resources Using Vensim
System Dynamics course
Finding key factors of depletion of Iran's under ground water resources in the Last 100 years, Developing the causal-loop and stock-flow model, Evaluating results of simulation with actual statistics

Design and Development of Smart Store Using Bizagi, Visual Paradigm, Tableau, and OutSystems
Management Information Systems course
Requirement analysis, Process design, UI design, Dashboard design

Data Extraction from Twitter Using Python
Internship

Graphical Simulation of a Clinic Using Matlab
Introduction to Discrete Simulation course

Technical Proficiencies:

Software:	GAMS, CPLEX, Tableau, MiniTab, BizAgi, Visual Paradigm, Simulink, Vensim, OutSystems, SolidWorks
Programming:	MATLAB, Python, R, C, C++