Dogacan YILMAZ

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SUMMARY

Ph.D. student with a strong background in optimization, decision making, and machine learning that developed various industrial data science solutions and produced research at the intersection of operations research and machine learning. Seeking to utilize data-driven solutions to provide business insight using theoretical knowledge and practical experience.

EDUCATION

New Jersey Institute of Technology
2019-Present

PH.D. IN INDUSTRIAL ENGINEERING
- Dissertation Title: Integrated Optimization and Machine Learning Approaches
- GPA: 4.0/4.0
- Relevant Coursework: Machine Learning, Deep Learning, Data Mining, Big Data, Optimization Foundations for Data Science, Statistical Methods in Data Science, Advanced Topics in Operations Research, Dynamic Programming

Bogazici University
2014-2019

B.S IN INDUSTRIAL ENGINEERING
- Honors Student
- Ranked top 0.025% in University Placement Test takers
- Constructed a recommender system for one of the largest e-commerce companies in Turkey using machine learning techniques as a senior project

EXPERIENCE

New Jersey Institute of Technology
2019-Present / Newark

RESEARCH AND TEACHING ASSISTANT
- Developed an integrated machine learning - optimization framework that reduces the solution time of a hard optimization problem more than 10-fold using deep learning algorithms
- Teaching Assistant for the courses Deterministic Models in Operations Research, System Analysis and Simulation, Work Measurement and Standards. Instructed office hours, demonstrated lab experiments, evaluated case studies and homework
- Member of the Systems Optimization and Data Analytics Lab

BSH Home Appliances
2018-2019 / Turkey

DATA SCIENTIST
- Designed a time series prediction framework to organize customer service operations for the largest appliances manufacturer in Europe
- Contributed a text mining application to predict the broken parts of appliances from customer complaints
- Analyzed sensory data from a smart factory to find manufacturing faults
- Examined potential AWS machine learning applications

PUBLICATIONS

- (Upcoming) Dogacan Yilmaz, İ. Esra Büyüktahtakın, "An LSTM-Optimization Framework to Predict the Optimal Solution of a Mixed-Integer Program"

SKILLS

PROGRAMMING LANGUAGES	*Experienced:* Python | R **Familiar:** C++ | SQL | C | VBA
FRAMEWORKS & LIBRARIES	CPLEX | Keras | NumPy | Pandas | scikit-learn | PyTorch | TensorFlow | Hadoop
LANGUAGES	*Native:* Turkish **Fluent:** English

EXTRA

- President of Bogazici University Aviation Club for 2017-2018. Licensed paraglider and voluntary paragliding instructor for students. Organized theoretical lectures and practical flight sessions for 50+ students. Increased the club glider inventory by more 20% with establishing a club alumni network