### MAY ALHAZZANI

Riyadh, KSA Mayh@mit.edu 055-288-3680

#### **EDUCATION**

• Masters in Media Arts and Sciences (Media Lab)

GPA 4.6/5

Sep 2019

Massachusetts Institute of Technology (MIT)

Relevant coursework: Advance Machine Learning, Matrix Methods in Data Analysis and Machine Learning, Computational Cognitive Science, Statistics Computation and Applications

Thesis: Deep embedding approach to classify purpose of trips between cities from GPS data

• Masters of Science in Computer Science

GPA 3.9/4

University of Colorado at Boulder

Relevant coursework: Probabilistic Models of Human & Machine Intelligence, Natural Language Processing, Machine Learning

Thesis: Statistical approach to measure the influence of transcription factors in gene regulatory networks

• Bachelor of Science in Computer Science

GPA 4.9/5

King Saud University (KSU)

### **EXPERIENCES**

# Senior Researcher at Center for Complex Engineering Systems at KACST and MIT (June 2021-present)

- Led research in developing a Bayesian model for latent groups detection influencing individuals decisions in social networks.
- Advised junior researchers on multidisciplinary research projects involving AI.

## Machine Learning Scientist, True Fit Corporation, Boston, MA (December 2019 - June 2021)

- Developed a hybrid recommendation system of collaborative filtering and content based approach to provide personalized recommendations on fashion items.
- Pioneered shoppers' behaviors understanding including detecting users styles using computer vision models, and profiling types of behaviors using information theory principles such as entropy.
- Collaborated on evaluating predictive models on clothing fit.
- Developed a regression based model to predict shoppers' size of clothing items.
- Communicated findings to product managers, engineering team and executive members.

### Research Assistant at Massachusetts Institute of Technology (2017-2019)

- Developed deep embedding approach using an autoencoder to detect purpose of trips between cities based on users' mobility behaviors from large GPS data.
- Simulated mobilization of agents using a recursive incentive recruiting model to model political recruitment of campaigns in the US.
- Demonstrated projects of my research group to visitors and collaborators in industry.

# Research Associate at Center for Complex Engineering Systems at KACST and MIT (2015-2017)

- Led research in developing a hidden Markov model to predict mobility in cities from phone data.
- Led research in developing clustering framework to identify attractions in cities from phone data.
- Presented my research for high-profile stakeholders, MIT faculty, and team members.

### Research Assistant at University of Colorado at Boulder (2012-2014)

- Analyzed the gene regulatory network in human cells using statistical significance testing methods.
- Created python scripts to analyze Arabic corpus for NLP semantic tasks.

#### RELEVANT SKILLS

**Programming** Python, R, Java, SQL

Technologies PySpark, Pytorch, Pyro, Pandas, Scikit-learn

Machine learning Deep learning, Bayesian models, unsupervised learning Data science Data cleaning, feature engineering, big data analytics

#### **PUBLICATIONS**

- May Alhazzani, Fahad Alhasoun, and Marta González, "Urban Attractors: Discovering Patterns in Regions of Attraction in Cities", Plos one, 2021.
- Fahad Alhasoun\*, **May Alhazzani**\*, Faisal Aleissa, Riyadh Alnasser, and Marta González. "City scale next place prediction from sparse data through similar strangers." ACM KDD Workshop, Halifax, Canada. 2017.
- Alhasoun, Fahad, Faisal Aleissa, May Alhazzani, Luis G. Moyano, Claudio Pinhanez, and Marta C. González. "Age density patterns in patients medical conditions: A clustering approach." PLoS computational biology, 2018.
  - \* Co-first authorship

## COMMUNITY SERVICE

- Google mentor and judge at the world largest hackathon "Hajj Hackathon", 2018
- Organizer of Riyadh Data Geeks meetup, first group of professionals in data analytics in the region (2016-2017)