# ELAHE GHASEMI

Northeastern University, Boston, USA +1 (857) 313 8405  $\diamond$ ghasemi.e@northeastern.edu

#### RESEARCH INTERESTS

- Designing Algorithms
- Graph Theory

#### **EDUCATION**

### Northeastern University, Boston, USA

2024 - present

PhD in Computer Science

Supervisors: Rajmohan Rajaraman, Mahsa Derakhshan

# Université Paris Cité, Paris, France

2022 - 2023

M.Sc. in Computer Science

Parisian Master of Research in Computer Science (MPRI)

# Sharif University of Technology, Tehran, Iran

2017 - 2022

B.Sc. in Computer Science

Department of Mathematical Sciences

### **PUBLICATIONS**

- Elahe Ghasemi, Vincent Jugé, and Ghazal Khalighinezhad. Galloping in fast-growth natural merge sorts. In 49th International Colloquium on Automata, Languages, and Programming (ICALP 2022). Schloss Dagstuhl-Leibniz-Zentrum für Informatik, 2022.
- Mohammad Rashid, Elahe Ghasemi, and Javad B Ebrahimi. Entropic weighted rank function. In 10th Iran Workshop on Communication and Information Theory (IWCIT 2022). CoRR, abs/2206.05968, 2022.

#### **ACHIEVEMENTS**

- Ranked 60th among 148,429 participants in national university entrance examination of Iran (Konkour)
- Granted PGSM (Paris Graduate School of Mathematics) scholarship of Fondation Sciences Mathematiques de Paris

#### RESEARCH EXPERIENCES

### Minimum Vertex Cover in Communication Model

Jan 2024 - July 2024

Supervisor: Rajmohan Rajaraman, Mahsa Derakhshan

# Job Scheduling with Bag Constraints

April - September 2023

Supervisor: Chien-Chung Huang

### Sorting Algorithms and their Complexity

September 2021 - March 2022

Supervisor: Vincent Jugé

# **Entropic Sumbodular Functions**

Supervisor: Javad Ebrahimi

# WORK EXPERIENCE

# Shab Company, Tehran

summer 2020

March 2021 - April 2022

Frontend Developer

· Internship under this company. Learned and implemented various aspects of web development with html, css, JavaScript and React.

#### LANGUAGES

Persian Native

English Advanced (TOEFL iBT Score: 110/120: R 27/30 - L 30/30 - S 25/30 - W 28/30)

French Beginner

### TEACHING ASSISTANT EXPERIENCES

Algorithms, Mahsa Derakhshan, Northeastern University	Fall 2024
Algorithms Design, Masood Seddighin, Sharif University of Technology	Spring 2021
Operating Systems, Hadi Foroughmand, Sharif University of Technology	Spring 2021
Theory of Languages & Automata, Javad Ebrahimi, Sharif University of Technology Fall 2020	
Designing Algorthms, Morteza Alimi, Sharif University of Technology	Spring 2020
Data Structures, Morteza Alimi, Sharif University of Technology	Fall 2019

### OTHER EXPERIENCES

# Peer Review - APPROX Conference

summer 2023

reviewer

# Theory Group Seminar at Northeastern University

Fall 2024

 $Co\mbox{-}organizer$