



# Majid Lotfian Delouee

Streaming Data Specialist  
Doctoral Researcher



## Profile

He received Master's and Bachelor's degrees in Software Engineering with majors in Networks and Information Systems, especially for IoT applications. Currently, he is researching on providing a trade-off between quality monitoring and privacy protection in event processing systems complemented by autonomous rule generation in IoT environments. In addition, he collaborates with the Parrot project, which is a joint research project involving the University of Oslo (Norway), the Technical University of Darmstadt (Germany), and the University of Groningen (The Netherlands).



## Education

Present  
↑  
Jul, 2020

### Ph.D. in Computer Science

*University of Groningen*

**Focus:** Establishing a trade-off between user quality and privacy requirements in complex event processing systems.  
**Thesis Title:** Mission-critical Event-based Systems, Meeting User Requirements in the Internet of Things.

Sep, 2015  
↑  
Sep, 2012

### M.Sc. in Software Engineering

*Azad University of Mashhad*

**Focus:** Developing a new routing algorithm for implementing network coding on wireless mesh networks.  
**Thesis Title:** An Optimized Network Coding Method for Wireless Networks.

Jul, 2011  
↑  
Sep, 2007

### B.Sc. in Software Engineering

*Ferdowsi University of Mashhad*

**Focus:** Network protocols, IoT environment and its applications, security and privacy aspects of IoT scenarios.  
**Thesis Title:** Design and Implementing a SIP soft-phone.



## Publications

2024

*Poster: Towards Federated LLM-Powered CEP Rule Generation and Refinement*

M. Lotfian Delouee, DG. Pernes, V. Degeler, B. Koldehofe, DEBS'24, ACM.

2024

*Driving Towards Efficiency: Adaptive Resource-aware Clustered Federated Learning in Vehicular Networks*

A. Khalil\*, M. Lotfian Delouee\*, V. Degeler, T. Meuser, A. Fernandez Anta, B. Koldehofe, MedComNet'24, IEEE.

2024

*APP-CEP: Adaptive Pattern-level Privacy Protection in Complex Event Processing Systems*

M. Lotfian Delouee, V. Degeler, P. Amthor, B. Koldehofe, ICISSP'24, SCITEPRESS.

2023

*AQuA-CEP: Adaptive Quality-Aware Complex Event Processing in the Internet of Things*

M. Lotfian Delouee, B. Koldehofe, V. Degeler, DEBS'23, ACM.



## Contact

### Address

🏠 Oostenrijkstraat 5, Almere, The Netherlands

### Official Email

✉️ m.lotfian.delouee@rug.nl

### Personal Email

✉️ majid.lotfian@gmail.com

### LinkedIn

in majid-lotfian-delouee

### Github

🔄 majid-lotfian

### Website

🌐 bit.ly/MajidLotfianDelouee



## Programming

### Java



### Apache Flink

FlinkCEP



### Python

Pandas, NumPy, etc



### Apache Spark

Structured Streaming



### Apache Kafka

Pub/Sub



### SQL



### ML

Tensorflow, Pytorch, Scikit-learn, etc



## Soft Skills

- Time Management
- Teamwork
- Problem-solving
- Leadership

2023 ● **Poster: Towards Pattern-Level Privacy Protection in Distributed Complex Event Processing**

M. Lotfian Delouee, B. Koldehofe, V. Degeler, DEBS'23, ACM.

2022 ● **Towards Adaptive Quality-aware Complex Event Processing in the Internet of Things**

M. Lotfian Delouee, B. Koldehofe, V. Degeler, MSN'22, IEEE.

2018 ● **Scheduling Data-driven Workflows in Multi-cloud Environment**

N. Soveizi, S. Abrishami, M. Lotfian Delouee, CKE.

2015 ● **Scheduling Data-driven Workflows in Multi-cloud Environment**

N. Soveizi, S. Abrishami, M. Lotfian Delouee, CloudCom'15, IEEE.



## Work experience

Present  
↑  
Mar, 2024

### Guest Researcher

*University of Amsterdam*

Conducting research and collaborating with colleagues in the INtelligent Data Engineering Lab (INDElab) as well as the Complex Cyber Infrastructure (CCI) group in the Informatics Institute.

Present  
↑  
Jul, 2020

### Educational Leadership

*University of Groningen, Ilmenau University*

Supervising students in Bachelor's projects and the Research Skill course, and master students in Student Colloquium event. Also, I supervised master's students in the Research Seminar course as an external cooperation with the Ilmenau University in Germany.

Jun, 2023  
↑  
Jul, 2020

### Teaching Assistant

*University of Groningen*

In a course that discusses the fundamentals of distributed systems.

Jul, 2020  
↑  
Jan, 2015

### Research Assistant

*Ferdowsi University of Mashhad*

Getting involved in multiple projects with M.Sc. students as project advisor concerning various topics such as Attribute-based Encryption, real-time healthcare data management systems, permission systems, load balancing, fog scheduling algorithms, PSO-based sensor selection mechanisms, scheduling algorithms for smart agents in smart factories, distributed trust calculation algorithm, and joint cluster head selection and trust calculation algorithm, mostly in fog-based IoT applications.

Oct, 2019  
↑  
Sep, 2011

### Teacher and Lab Technician

*Ministry of Education, Iran*

Teaching computer science to over 500 high school students for 6 years, working as a lab technician for two years, including networking tasks, and maintaining online and networked education and learning management systems.



## University Projects

- Effective Communication
- Flexibility
- Documentation
- Adaptability
- Engaging Presentation



## Awards

- Nomination for the best student paper award in the 10th International Conference on Information Systems Security and Privacy (ICISSP'24).



## Languages

English Fluent



Dutch Intermediate



Persian Native



## Miscellaneous

- Linux
- L<sup>A</sup>T<sub>E</sub>X(Overleaf/R Markdown)
- Microsoft Office
- Git
- Databricks
- Shell (Bash/Zsh)
- Sports
- Cooking

Present  
↑  
Jul, 2020

● **Parrot**

*Oslo, Norway*

Privacy Engineering for Real-Time Analytics in Human-Centered Internet of Things.



**References**

● **Prof. Dr. Boris Koldehofe**

*Ilmenau University*

● **Dr. Victoria Degeler**

*University of Amsterdam*