

# Madelon Hulsebos

Amsterdam, Netherlands | [m.hulsebos@uva.nl](mailto:m.hulsebos@uva.nl) | [madelonhulsebos.github.io](https://madelonhulsebos.github.io)

I am interested in **Intelligent Data Systems**. So far, my research has been on **learned table representations** and their **applications** like data preparation, search, and analysis.

## EDUCATION

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University of Amsterdam – Amsterdam, Netherlands

*PhD Computer Science*

*Sep 2020 – Feb 2023 (expected)*

Delft University of Technology – Delft, Netherlands

*MSc Computer Science*

*Sep 2016 – July 2018*

*BSc Technology, Policy and Management*

*Sep 2011 – July 2015*

## ACADEMIC EXPERIENCE

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University of Amsterdam – Amsterdam, Netherlands

*PhD Researcher, INDE Lab*

*Sep 2020 – Feb 2023 (expected)*

- Advised by Prof. Paul Groth and co-advised by Çağatay Demiralp (industry).
- Proposed an agenda around methods and datasets for inferring table semantics and applications thereof in practice.

Massachusetts Institute of Technology – Cambridge, United States

*Visiting Collaborator, MIT Media Lab*

*Aug 2018 – March 2019*

- Led and maintained a research project on semantic table understanding.
- Contributed to a data visualisation training and benchmarking dataset.

## INDUSTRY EXPERIENCE

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Sigma Computing – San Francisco, United States

*PhD Student Researcher, previously Research Intern (Summer 2021)*

*2021 – present*

- Developing systems for deploying table understanding models, and applications like data preparation and search.
- Contributing to an interactive data science tool (Decision Studio), mainly backend design and analyses.
- Publishing and presenting the outcomes of my work at scientific conferences, e.g. CIDR '22.

KPN, HEINEKEN – Rotterdam/Amsterdam, Netherlands

*Data Scientist*

*2019 – 2021*

- Developed and integrated an ML system for financial forecasting that produced more accurate forecasts.
- Built two ML tools for evaluating marketing campaigns based on causal inference and Bayesian modelling.
- Gave talks e.g. on data validation and transfer learning, initiated a reading group, mentored junior data scientists.

## TEACHING EXPERIENCE

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Delft Institute of Technology – Delft, Netherlands

*Graduate Teaching Assistant, Pattern Recognition & Web Information Systems groups*

*2017 – 2018*

- TA for the MSc courses: Pattern Recognition (IN4085), Web Science & Engineering (IN4252).
- Supported 250+ graduate students throughout projects and lab sessions.
- Evaluated student assignments, projects and presentations.

Aalto University – Helsinki, Finland

*Research and Teaching Assistant, Machine Learning for Big Data*

*2017*

- Developed assignments for the BSc course “Machine Learning: Basic Principles” (CSE3210) with 500+ students.
- Conducted experiments for semi-supervised learning over networks and presented the work at ICASSP.

## ACADEMIC SERVICE

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Assistant Editor, Journal of Systems Research (jsys)	2022 - present
Co-organizer, SemTab challenge @ ISWC	2021 - present
Program committee, AIDB @ VLDB	2022
Program committee, EDBT (Industry track)	2022
Program committee, WWW (Industry track)	2022
Program committee, ESWC (Posters & Demos)	2022
Reviewer, NeurIPS (Datasets & Benchmarks track)	2021

## SELECTED PUBLICATIONS

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GitSchemas: A Dataset for Automating Relational Data Preparation Tasks, DBML@ICDE, 2022.

Döhmen, T., [Hulsebos, M.](#), Beecks, C., Schelter, S.

Making Table Understanding Work in Practice [abstract], CIDR, 2022.

[Hulsebos, M.](#), Gathani, S., Gale, J., Dillig, I., Groth, P., Demiralp, C.

Augmenting Decision Making via Interactive What-If Analysis, CIDR, 2022.

Gathani, S., [Hulsebos, M.](#), Gale, J., Haas, P. J., Demiralp, C.

GitTables: A Large-Scale Corpus of Relational Tables, under review, 2021.

[Hulsebos, M.](#), Demiralp, C., Groth, P.

Sato: Contextual semantic type detection in tables, PVLDB, 2020.

Zhang, D., Suhara, Y., Li, J., [Hulsebos, M.](#), Demiralp, C., Tan, W.

Sherlock: A deep learning approach to semantic data type detection, SIGKDD, 2019.

[Hulsebos, M.](#), Hu, K., Bakker, M., Zraggen, E., Satyanarayan, A., Kraska, T., Demiralp, C., Hidalgo, C.

VizNet: Towards a large-scale visualisation learning and benchmarking repository, CHI, 2019.

Hu, K., Gaikwad, N., [Hulsebos, M.](#), Bakker, M., Zraggen, E., Hidalgo, C., Kraska, T., Li, G., Satyanarayan, A., Demiralp, C.

## BOARD MEMBERSHIP

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UniPartners Delft – Delft, Netherlands

*Supervisory Board Member*

2017 – present

- Supervise the financial and strategic positions of the company.
- Implement structured financial control, KPI oriented leadership and a supervision cycle.

*Executive Board Member*

2015 – 2016

- Controlled and optimised the quality of internal and external products and processes.
- Daily management of projects, contributing to a revenue of over €100 K.
- Moderated the CRM system (Salesforce) and trained 10+ boards.