

JENS D'HONDT

Research Scientist – Big Data Algorithms

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in jens-d-hondt



EDUCATION

Msc. Data Science in Engineering

Eindhoven University of Technology (TU/e)

2019 – 2021 Eindhoven, the Netherlands

GPA: 9.1/10 (Cum Laude), Thesis: 9.5/10

Bsc. Industrial Engineering

Eindhoven University of Technology (TU/e)

2016 – 2019 Eindhoven, the Netherlands

GPA: 8.5/10 (Cum Laude), Thesis: 9.5/10

EXPERIENCE

Research Scientist - Full Time

Eindhoven University of Technology (TU/e)

Nov. 21' – present (1 yr) Eindhoven (NL)

- Researching and developing novel algorithms and theories for **complex similarity search** on big data (i.e. TB-scale).
- TA of the course 'Big Data Management', educating students about Map-Reduce, sketches, streaming algorithms, and distributed systems.

Data Engineering Intern - Full Time

BMW Group

Jul. 20' – Dec. 20' (0.5 yr) Munich (GER)

- Lead migration of a legacy Data Warehouse from On-premise to AWS using **Spark** and **Bash** scripting.
- Designed data infrastructure to process ~150 TB/day, improving part anomaly-detection. Used **AWS Glue**, **Lambda** and **DynamoDB**.
- Re-engineering the data-storage and retrieval strategy of dashboards to improve scalability to handle ~1 TB of data.

Software Engineer - Freelance

Jens d'Hondt Data Solutions

Dec. 19' – Nov. 21' (2 yr) Eindhoven (NL)

- Creation and implementation of data-driven applications, performing statistical analyses for clients leveraging open-source tools. Main technologies used: **Angular**, **Python**, **AWS**, **Spark**, **Kafka**.

Junior Data Scientist - Part Time

Crossyn Automotive

Oct. 18' – Dec. 19' (1 yr) Tilburg (NL)

- Project leader on driving behavior and mileage prediction algorithms, member of data infra redesign team (setting up **Hadoop/Spark** clusters).

PUBLICATIONS

- Minartz, K., d'Hondt, J., & Papapetrou, O. (2022). Multivariate correlation discovery in static and streaming data. *Proceedings of international conference on very large databases*, 2022.
- d'Hondt, J., Nuijten, R., & Van Gorp, P. (2019). Evaluation of computer-tailored motivational messaging in a health promotion context. In *Lecture notes in artificial intelligence*.

PROJECTS

Motivational Messaging Bot

- Designed and integrated end-to-end (iOS & Android) continuous-learning pipeline which automatically created personalized messages and learned from retention-rates. Published in 2019 [2].

Driving Behavior Grading System

- Built streaming service for real-time grading of people's driving behavior based on both structured and unstructured data (car acceleration/speed, surrounding traffic and weather information) using **Apache Kafka**, and **Python**.

Streaming Algorithm - Complex Correlation Analysis

- Researching and developing a scalable algorithm for higher-order linear correlation detection on streaming data. Written in **Java**. Published in 2022 [1].

EXTRA-CURRICULAR

- Founder** - Dpasse Student Recruitment, Eindhoven, 2018-2020.
- Summer School** - Harbin Institute of Technology, Shenzhen, 2019.
- Participant** - Boston Consultancy Group 7-day Business course (Berlin, 2018).
- Student Consultant** - Rabobank, as part of Netherlands-Asia Honours Summer School, 2019.
- Acquisition leader** - University Racing Eindhoven (Formula-Student Team Eindhoven)

SKILLS

Python, Java, Spark, SQL, Bash
C, Airflow, AWS, Tensorflow
R, Docker, Git, Angular



LANGUAGES

English, Dutch
French, German



REFEREES

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