JENS D'HONDT

PhD Candidate - Big Data Systems and Engineering



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in jens-d-hondt



A dedicated researcher with extensive experience in scalable data analytics and machine learning. Proven track record of designing and implementing efficient algorithms capable of handling terabytes of data. Published in top-tier conferences and journals, with expertise in similarity search. A confident presenter at conferences and teacher in classrooms.

EDUCATION

PhD. in Computer Science

Eindhoven University of Technology (TU/e)

2021 - 2025 (Expected)

Eindhoven, the Netherlands

Dissertation Title: "Extending Similarity Search...".

Advisor: Dr. Odysseas Papapetrou

Msc. in 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. in Industrial Engineering

Eindhoven University of Technology (TU/e)

2016 - 2019

Eindhoven, the Netherlands

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

PUBLICATIONS

- [1] d'Hondt, J.E. et al. (2025, under review) A Structured Study of Multivariate Time-Series Distance Measures. SIGMOD, 2025.
- [2] d'Hondt, J.E. et al. (2025, under review) MS-Index: Fast Subsequence Search for Multivariate Time Series under Euclidean Distance. SIGMOD, 2025.
- [3] Papapetrou, O. & d'Hondt, J.E. (2024) Multivariate Similarity Search A Call for a New Breed of Similarity Search Algorithms. *ICDE*, 2024.
- [4] d'Hondt, J.E., Papapetrou, O. (2024). Beyond the Dimensions: A Structured Evaluation of Multivariate Time Series Distance Measures. *MulTISA workshop, ICDE, 2024*.
- [5] d'Hondt, J.E., Minartz, K., & Papapetrou, O. (2023). Efficient detection of multivariate correlations with different correlation measures.
 VLDB Journal, 2023.
- [6] Minartz, K., d'Hondt, J.E., & Papapetrou, O. (2022). Multivariate correlation discovery in static and streaming data. VLDB, 2022.
- [7] d'Hondt, J.E., Nuijten, R., & Van Gorp, P. (2019). Evaluation of computertailored motivational messaging in a health promotion context. *Lecture Notes in Artificial Intelligence* 2019.

ORGANIZATIONAL

- Publication chair to the workshop on Multivariate Time Series Analysis (MulTISA) at ICDE 2024 and 2025.
- Lead researcher of the Correlation Detective research project (link). Managing researchers, funds, and promotion material.
- Master thesis supervisor to 7 students at TU/e.
- Teaching assistant for the course 'Big Data Management' at TU/e.

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, SQL, Bash Airflow, Docker R, Git, Angular



LANGUAGES

English, Dutch French, German



REFEREES

Dr. Odysseas Papapetrou

@ Eindhoven University of Technology

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Prof. Dr. George Fletcher

@ Eindhoven University of Technology

o.papapetrou@tue.nl

Dr. John Paparrizos

Ohio State University

Dr. Jens Kohl

@ BMW Group

WORK EXPERIENCE

Data Engineering Intern - Full Time **BMW Group**

- **i** 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 \sim 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

iii 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).

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.