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Summary: Proficient researcher and experienced software engineer with knowledge in machine learning (ML), deep learning (DL), natural language processing (NLP), recommender systems, and privacy-preserving algorithms. Effective team player, adept at planning and communication in any setting. Passionate about research and implementing impactful technology-driven solutions.

#### :: Education

## Medical Informatics (MSc)

University of Amsterdam (Sep 2019 – Aug 2021) Thesis: Performance of a multicenter TAVI mortality prediction model – center variability and case-mix differences.

Supervised by: Prof. Ameen Abu-Hanna (Grade: 9/10)

# Computer Science (BSc Hons)

University of Glasgow (Sep 2011 – June 2015)

Thesis: Emotion aggregation techniques from text corpora using ML and NLP.

Supervised by: Prof. Joemon Jose (Grade: A4)

#### :: Research Outputs

Using Autoencoders for predicting clinical codes in EHR records for ICU patients

Presented at AI in medicine (AIME) conference (June, 2023)

An integrated approach to geographic validation helped scrutinize prediction model performance and its variability

Published in Journal of Clinical Epidemiology (Feb, 2023)

Performance validation of Federated Learning-based models for 30-day mortality risk in the Dutch TAVI population was comparable to central strategies, and outperformed local strategies Submitted (Dec, 2023)

An interactive interface for visualizing events on Twitter

Presented at SIGIR (July, 2014)

# :: Experience

#### PhD Student

Amsterdam UMC (Oct 2021 – Present)

Development and validation of AI-based tools in the healthcare and cardiology domains. Researching clinical prediction models for patient outcome prognosis and phenotyping. Investigating uses for recommender systems in automating electronic health record (EHR) data entry.

### Software Engineer

Amsterdam UMC (Oct 2020 - Apr 2021)

Clinical decision support system portal for physicians. Developed and implemented middleware rule-based engine and web-interface

**Dutch National Heart Registry (NHR)** (Oct 2020 – Present) Implementing new components, requirements gathering, supporting clinicians and data analysts. Keywords: Security, reliability, big data.

#### DevOps Engineer

**Flowable-Mimacom** (*Nov 2018 – Aug 2019*) Implementing system monitoring tools, ETL pipeline development for big data. Keywords: microservices, cloud, scalability, big data.

#### Technology Analyst

JPMorgan Chase & Co (Sep 2015 - Nov 2018)

Worked in asset management, reference data, and central & investment bank divisions. Helped in organizing internal team-building events (conferences, workshops, hackathons, etc.) and in mentoring newer analysts. Keywords: Agile, IoT, cyber security, mentoring, big data.

## DevOps Engineer

Formedix (May 2013 – Aug 2015)

Developed software for automating clinical trial registration and submissions in the US and Japan. Implemented and maintained infrastructure for continuous integration. Keywords: CDISC, Cloud-agnostic, microservices, Agile, virtualization, AWS.