

Machine Learning Engineer with PhD

SUMMARY

At Impacter, we believe in the power of science. Academic insights help us to understand our world, solve society's most urgent challenges and to inform those working on these critical problems. We think that academics should *get out more* – out of academia, that is. That's why we build software to seduce scientists to collaborate with society.

The software we build (<u>Impacter</u>) helps academics when they apply for research funding. Impacter compares their research ideas with existing projects, it checks the proposals' readability and it highlights common mistakes. We in particular examine paragraphs on societal impact.

At the same time: many excellent proposals don't get funded. We want to give these proposals second chances at different funders by finding fitting funding opportunities based on the existing proposals. Funding opportunities can also be matched with short descriptions, or sets of publications.

We want to make these algorithms learn from user feedback. As a Machine Learning Engineer at IDfuse, you'll develop and deploy advanced Machine Learning (Active Learning) to create these tailored matchmaking algorithms, and improve the fit between new research ideas and funding streams.

JOB DESCRIPTION

Your job is to improve the quality of the matches generated by the algorithms, working closely with our CTO and founder Tijmen Altena. The matchmaking algorithms are enhanced Document Similarity models, starting from basic TFIDF and document embeddings, but encompassing other features that also encompass eligibility criteria for certain funding.

Our ideal candidate is a resourceful PhD who has first-hand experience with the academic world. Our candidate loves science, but is not sure if they want to stay in academia. You're self-starting and entrepreneurial, and in our small team there's plenty of diverse tasks to go around.

Your background should be in computer science or a related field. We are looking for someone that loves science but rather works *with and for* scientists than *as* a scientist. Enthusiasm and curiosity are the key drivers that keep us contributing to a better (scientific) world.

Your task will be to use the state-of-the-art in Machine Learning to combine publicly available data with our proprietary data, and thereby create matchmaking solutions. Initially, these matchmaking algorithms will find funding opportunities for researchers. In the future, we also want to connect policymakers, journalists and academics to each other.

Your roles include identifying data-sources, finding the right features and adopting mathematical approaches for matchmaking model validation. You'll fulfil a core function in improving the performance of the intelligent parts of the system, which the rest of the team will bring to our clients in a usable and friendly way. The technology stack is Python based and employs Spacy and AllenNLP for critical Natural Language Processing.

In a start-up setting, you'll also sometimes be DevOps, Customer Support or table tennis opponent. The dynamic environment we're in brings diverse activities and challenges, providing lots of room to grow professionally together with the company. The team currently consists of 5 people in the age-range of 22 - 45. We are working in the heart of the Netherlands, the vibrant city of Utrecht and have our office in the start-up and scale-up community called DotSlash Utrecht.



REQUIREMENTS

- Have a PhD fields: computational linguistics, AI, computer science, mathematics
- Experience with Machine Learning
- Experience with Python
- Familiarity with Natural Language Processing

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This job opening is funded by the Innovation Associate program of the European Union. This brings an additional constraint to applicants, who can only have spent 12 months out of the past 36 in The Netherlands.

PERKS

This position brings a combination of working for a private enterprise, but with and for academics. Design and build with cutting edge technologies, without the pressure of publish-or-perish.

The offer covers relocation costs to the Netherlands, an educational program and a competitive salary.

We share a coffee and lunch corner with two other young companies (8 and 4 fte) and regularly end the week with a drink on the Friday afternoon with plenty of room to enjoy a table tennis competition, a game of darts and good conversation.

APPLICATION PROCESS

Applications should consist of a CV and a cover letter and can be submitted by e-mail to Tijmen Altena (<u>Tijmen@IDfuse.nl</u>). This job opening is open until August 17th, with interviews and an assessment planned in the two weeks thereafter. The envisioned start date is early September 2020.

CORONAVIRUS

Due to the coronavirus and related possible travel restrictions, we are flexible in delaying the move to The Netherlands until after the start date. Starting with remote work followed by a later arrival in The Netherlands is definitely an option, as is initial remote working from a location in The Netherlands.