**PhD Position Decentralised Machine Learning**

**[Specifications]**

Faculty/Department Faculty of Electrical Engineering, Mathematics and Computer Science/Distributed Systems

Job type PhD position

Scientific field Xxx

Hours per week XX

Salary - € X.XXX,- - X.XXX,-

Desired level of education: MSc

Vacancy number [generated automatically]

**Challenge**: Developing and building a fully decentralised video search engine.

**Change**: Eliminating the need for servers when developing machine learning.

**Impact**: Safe machine learning benefiting billions of users.

**[Job description]**

Billions of mobile devices mean unprecedented computing power and a surge in generated data. And whoever ‘owns’ the data, can build better and more personalised services using machine learning. With all the inherent privacy risks and massive data breaches as a result. At TU Delft’s Tribler Lab, we want users to take back control and take Tech Giants out of the equation to drive societal benefits of machine learning. As a PhD candidate you will show the viability of decentralised machine learning. Are you ready for applied research, building an alternative to the likes of YouTube and TikTok that could potentially benefit billions of users?

Although federated learning is a step in the right direction, you will take decentralised machine learning even further, eliminating servers and harnessing the massive computing power available. Your research will be geared to putting the system architecture in place, and you will build a video search engine to show it works. The spadework has been done by the team that has created [Tribler](https://www.tribler.org/). Thanks to well over two million users, you have access to a sizable user base and data. In addition, you will coach master students and participate in relevant communities, possibly even attend and speak at conferences.

Your home base with be our twelve-strong, internationally diverse team of developers, postdocs, PhD candidates, academic staff and ethicist. Embracing the principles of fairness, openness and democracy, we share a mission to transform the Internet into a global brain for the benefit of all mankind. We conduct fully funded and groundbreaking research, covering topics like the digital European passport and the digital euro. You’ll be joining a group of peers trained in computer science, which makes for riveting sparring and knowledge sharing. Fostering a highly collaborative and friendly atmosphere, we will give you all the support you need to develop and grow.

**[Requirements}**

You thrive on bridging research and the development of groundbreaking architecture, potentially benefiting billions of users. Your scientific writing skills are well honed. And although you don’t need to be an extrovert networker, you do know how to collaborate with the developers in your team. You get the freedom to take decisions, but understand the importance of first discussing your ideas and initiatives with your fellow team members, to ensure our research stays aligned.

You also have:

* An MSc in Computer Science, and in your master thesis work you have preferably focused on distributed systems or a broader systems-oriented subject.
* The ability to engineer operational systems.
* Experience with GitHub open source projects.
* A good command of spoken and written English, as you’ll be working in an internationally diverse community.

**[Conditions of employment]**

[Automatically completed by recruitment system]

**[TU Delft (Delft University of Technology)]**

[Automatically completed by recruitment system]

**[Department]**

[Automatically completed by recruitment system

**Additional information**

If you would like more information about this role, please contact please contact [name], [role], email [email address].

**Application procedure**

To apply, please complete the application form [link] and add the following documents to your application:

1. Motivation letter.
2. Detailed CV.
3. Copies of your BSc and MSc degrees and transcripts.
4. Names and contact information of at least three relevant references. We will not contact references without your consent.

Please apply before [date] 2023.

After the first selection, video interviews will be held on [dates] 2023. The interviews at TU Delft will take place on [dates] 2023.

**[Metatitle]**

PhD position in decentralised machine learning | TU Delft

**[Metadescription]**

Take on Big Tech by developing truly decentralised machine learning to benefit billions of users, and proving it works, as a PhD candidate at TU Delft.

**[Intro’s social media 3x]**

As a PhD candidate at TU Delft, you will develop truly decentralised machine learning and prove its feasibility in an operational video search engine. Are you ready to take on Big Tech and enable potentially billions of users to take back control of their data while benefitting from machine learning? Apply now!

Machine learning needs data. So how do we protect the privacy of billions of users and still let them benefit from machine learning? By developing truly decentralised machine learning, proving its feasibility in an operational video search engine. Interested? Check the job post for this exciting PhD position and pave the way for the Internet’s transformation!

Your challenge as a PhD candidate at TU Delft is to develop decentralised machine learning, proving its feasibility by building an operational video search engine. Can you imagine competing with the likes of YouTube and TikTok, helping potentially billions of users take back control of their data? Apply now!

**[Relevante hashtags]**

#vacancy #workingatTUDelft #PhDposition #decentralisedmachinelearning #privacy #cybersecurity #searchengine