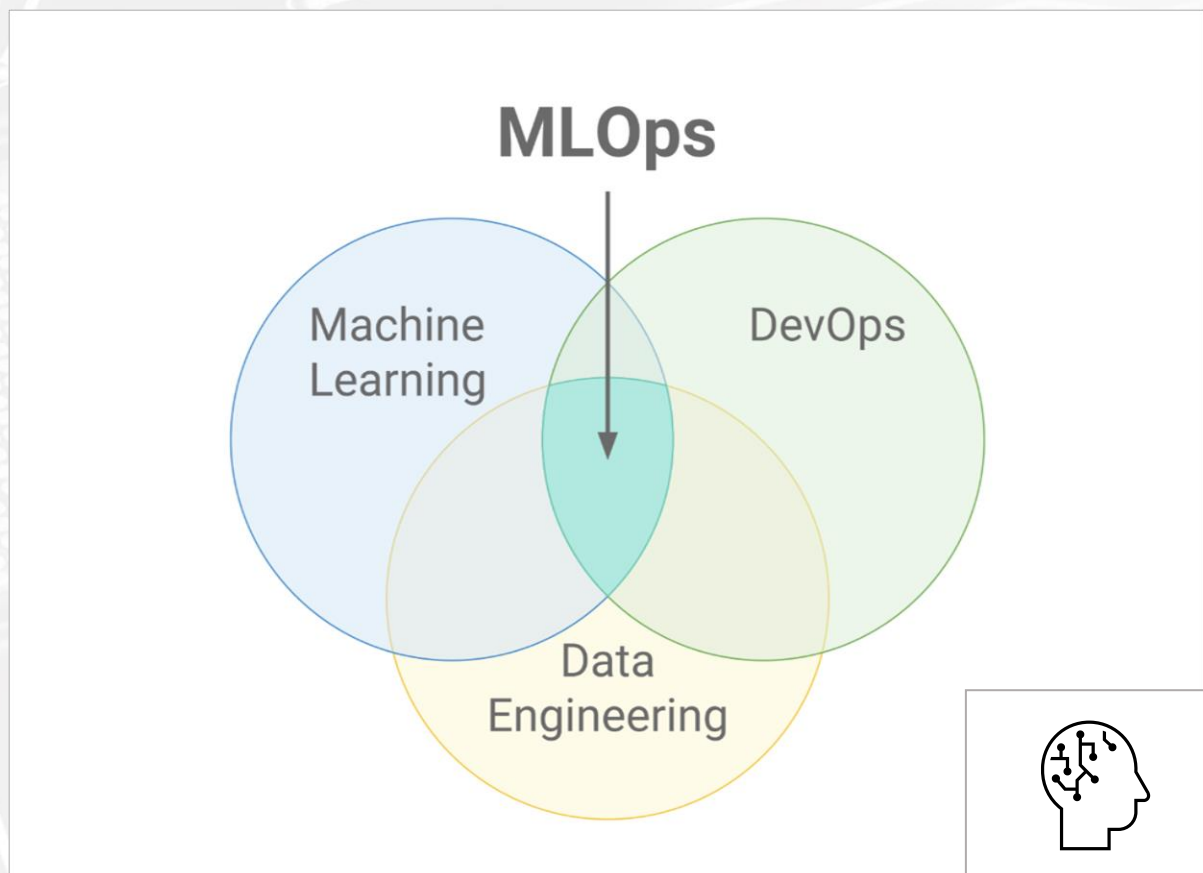# INFOTIV
INSTANT INNOVATION

THESIS PROPOSAL
Implementing CI/CD Pipeline for ML-Artifacts through MLOps

KEYWORDS:

Machine Learning, Python, MLOps, Machine Learning Operations, CI/CD

TARGETED PROGRAMS:

Computer Engineering, Information Engineering, Automation & Mechatronics Engineering, Engineering Physics, Engineering Mathematics

THESIS PROPOSAL

Implementing CI/CD Pipeline for ML-Artifacts through MLOps

PURPOSE OF THE STUDY

Infotiv TechDev has machine learning models that require continuous maintenance. We are in search of an automation engineer who possesses an interest in both data management and data engineering that can help us keep the quality of our code, data and model at the same level. This automation engineer will be responsible for researching various alternative platforms, and designing and executing the required automations within them. Our objective is to develop a forward-looking solution that remains applicable to our upcoming projects as well.

The primary purpose of this project is to internally research and deploy the necessary infrastructure and seamlessly integrate our existing system within it.

Potential Research questions:

- Challenges in automated tuning of training parameters
- Verification and validation of ML systems
- CI/CD of ML systems

The above research questions are examples, and the proposal will be tailored to the specific candidate(s).

WHO ARE WE LOOKING FOR?

We are looking for 2 master students with a background in computer engineering, engineering mathematics, engineering physics or equivalent program, who wish to conduct their thesis during the spring of 2024. Applicants shall have experience in machine learning, software development and image processing. Applicants shall also have experience from programming languages such as C++ or Python, and it is meritorious to have previous experience from or knowledge of data analysis and collection.

ABOUT US

TechDev is a department at Infotiv who focuses on SW & HW development and test solutions. We currently consist of 70 technical consultants with diverse backgrounds and experience from many technological fields. Our employees use their expertise to provide tailored solutions to all kinds of challenges, ranging from SW development, machine learning and simulations, to project & test management and way of working. One of our key strengths is the friendly atmosphere in our technical community, which provides access to TechDev's collective knowledge through internal collaboration tools and competence leader program, continuously providing updates in the latest tech.

HOW TO APPLY

Apply for this thesis via [https://www.infotiv.se/karriar] no later than 2023-11-21. Assure to attach your resumé and a short summary of why you want to partake in this thesis.

For further information, contact: Michael Nilsson [michael.nilsson@infotiv.se] +46(0)-76 000 39 60