



# CHAOS ENGINEERING

Is your degree almost in sight? And are you looking for a challenging internship in the field of software development/ data engineering? Then we might be a good match! At Blenddata we are looking for a graduation intern that can start from September 2023.

#### About your thesis

In your thesis you will investigate the possibility of applying chaos engineering to test data pipelines that run on distributed systems. You will have the opportunity to explore the application of the limited tools available, or you can explore the implementation of your own solution to test data pipelines on distributed systems with chaos engineering. It's up to you!

# Why this subject?

Blenddata wants to be at the forefront of technology; with your research you can help us to understand the concept of chaos engineering further and better within a business setting at one of our customers. Your research and proposed solution will help us to facilitate our customers with chaos engineeringrelated questions and implementations.

## What is Chaos engineering?

Chaos engineering is the discipline of experimenting on a system, to build confidence in the system's capability to withstand turbulent conditions in production. This methodology is particularly relevant in large-scale distributed software systems. While each individual software solution within a larger distributed system can function properly, interactions between the systems might result in unpredictable outcomes. This, along with real-world events that can occur and affect production environments (such as unavailability of systems and failure of data sources or resource providers) makes these systems chaotic.

Examples of challenges within chaotic systems include:

- System wide unwanted behaviors can occur in production environments that could impact the business.
- System owners are often unaware of the impact of the outage of a system when unwanted behavior occurs, and often don't know how to respond to this.
- This leaves system owners into the dark on how to improve robustness against unwanted behaviors.

Through your research, we hope to gain more insight into the above questions. You will help us to answer these questions!

Currently the first tools are being introduced to do some chaos engineering testing on your distributed systems (e.g. Microsoft Azure Chaos Studio). In our company we work with data pipelines (a lot), that often also run on distributed systems in production. For these use-cases chaos engineering could be very useful.





## Who are we looking for?

You:

- Are seeking a graduate internship starting in September 2023;
- Are pursuing a degree in the field of Data Science, Computer Science, or similar;
- Live in the Eindhoven area;
- Are enthusiastic, eager to learn and ambitious;
- Enjoy working together in a team.

## What to expect from us?

- A compensation of €500,- per month based on a full-time commitment;
- A friendly environment to develop yourself;
- You will become part of an enthusiastic team who are eager to help you develop further;
- The opportunity to join Blenddata upon successful completion of your thesis
- Daily provided lunch with the team at the office;
- An inspiring environment with our office in the center of Eindhoven;
- Monthly team events and weekly Friday afternoon drinks.

## Are you interested? What are you waiting for!

Then we would love to get in touch with you! Apply by using the apply button below or send us your resume with some brief information about yourself. Then we will contact you after this.

Any questions? We're happy to help you! Please feel free to contact us:

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