Internship Probabilistic Machine Learning (m/f/d)

At Digitalization & Information Services, we are shaping the digital transformation at BASF. In doing so, we are establishing a stable and secure IT infrastructure and jointly developing innovative digital solutions with the BASF divisions, which make our customers more successful. We are constantly looking for new and promising ideas and technologies in order to be the world’s leading digital chemical company.

LOCATION
Ludwigshafen, DE

COMPANY
BASF SE

WORKING HOURS
Full-time

CONTRACT TYPE
Internship

WORKING AREA
Research & Development

REFERENCE CODE
EN68262089_DIGI4_1

RESPONSIBILITIES

- Our interdisciplinary team digitalization drives forward the digital transformation of one of our largest production sites.
- We apply modern methods from applied mathematics, data science, informatics and automation, particularly machine learning, hybrid modeling, model-based simulation and optimization.
- You develop innovative digital solutions together with experts from various fields.
- You work in developing probabilistic graphical models for modeling of the large-scale production data.
- Further topics are modeling of the graphs derived from production plants with statistical approaches (e.g. Bayesian methods). The applications include root cause analysis in the chemical plants (e.g. to better understand anomalies, product quality, etc).
- The internship may be followed by a master’s thesis (supervised by Prof. Dr. Holger Froehlich, University of Bonn, Germany).

QUALIFICATIONS

- You have above-average academic performance or a bachelor’s degree in applied mathematics, statistics, natural sciences, informatics, engineering or similar.
- You have knowledge in Python programming language.
- You enjoy working with data and mathematical/statistical models and have experience in these fields.
- Experience in Bayesian statistics or probability is a plus.
- With your open-minded and enthusiastic spirit, you contribute to the team and communicate in English.
- Experience in chemical engineering topics is not mandatory.

BENEFITS

From day one you will be part of the BASF family. You will get involved in challenging fields of activity and have the opportunity to work on exciting projects in an interdisciplinary environment. Depending on the location of the respective group company you will get to know BASF and participate in various workshops and guided tours. In this way you will make numerous interesting experiences and get a deep insight into the world’s leading chemical company.

Information regarding internships: on.basf.com/internship

ABOUT US

Ludwigshafen is the world’s largest integrated chemical complex and home to BASF Group headquarters. Located in the heart of Europe’s Rhine-Neckar metropolitan region, you will find this to be an attractive place for both work and leisure time.

Learn more about BASF SE at http://on.basf.com/Headquarters

At BASF, the chemistry is right. Because we are counting on innovative solutions, on sustainable actions, and on connected thinking. And on you. Become a part of our formula for success and develop the future with us - in a global team that embraces diversity and equal opportunities irrespective of gender, age, origin, sexual orientation, disability or belief.

Together we can accomplish everything. Through the power of connected minds.

We are looking forward to your online application at www.basf.com/jobs.
We are happy to answer your questions: Email jobs@basf.com | Tel 00800 33 0000 33