Head of Chemical Data Science

LIFE CYCLE ASSESSMENT **CHEMICALS** **PYTHON**

MACHINE LEARNING **SUSTAINABILITY**

As soon as possible

Cologne, Germany
(flexible home/office working possible)

Responsible for extension of database and chemical knowledge with the power of data analytics and machine learning

ABOUT

carbonminds

Carbon Minds is a data analytics company and life-cycle data provider. We use our proprietary digital model of the global chemicals and plastics industry to offer our clients unprecedented levels of transparency about environmental impacts in global supply chains. This model also creates endless possibilities for data analysis and machine learning.

We are a growth-stage startup with a range of high-impact projects and major partners. Our working culture is flexible, friendly and motivated. We are a close-knit team working in a mutually supportive atmosphere for a common goal: **sustainability.**

RESPONSIBILITIES

1. Creating an industry first automated carbon footprinting tool for complete product portfolios, primarily by automating the process that matches our chemical carbon footprint data with our customer's raw materials
2. Data analysis and research projects. Use machine learning and neural networks to analyze and improve our data. For these projects, we are collaborating with external teams at several universities. You will be involved with implementing and publishing the work in scientific journals
3. Expand our data by creating a machine learning based system for automatically including new reactions based on existing databases, and integrate these reactions with our internal methodology to calculate environmental impacts
4. Increase our Python capabilities and work with our development team to transition our current Matlab code to Python

JOB REQUIREMENTS

Position type
- Professional, 4+ year of working experience

Education/Degree
- Chemistry, Computational engineering, Chemical engineering, or Mechanical engineering

Required experience
- Extensive Python coding experience is a must
  - → The following packages are needed: **pandas, numpy, scipy, Brightway (optional), PyTorch and TensorFlow**
- Detailed knowledge about organic and inorganic reaction chemistry
- Detailed understanding of the principles of machine learning and the underlying theory
- Basic knowledge about petrochemical processes
- Experience in generating python packages is a benefit but not a must

Language requirements
- Fluent in English, German is a plus but not a must

Additional soft skills
- You are highly motivated to learn and work in an interactive start-up environment
- You have excellent communication and presentations skills

BENEFITS AT CARBON MINDS

- Flexible working hours
- Potential for flexible home/office working in Cologne
- Simple and fast personal improvement with a high learning-curve and varying tasks
- We are seeking long-term relationships with a sense of satisfaction on both sides
- Competitive salary, based on a fixed salary structure that accounts for your experience
- Last but not least: **Doing good for the environment!**

Please send (as a minimum) your CV with relevant work experience, a Cover Letter highlighting your motivation for the job, certificates from university degrees and the respective overview of grades to **application@carbon-minds.com**. Feel free to attach further documents you think are important.