



## Hiwi Job

### " Computer Vision Assistant for Biodiversity Research: Model Development and System Integration "

We're seeking a dedicated student assistant to join our biodiversity research team, focusing on computer vision applications. Your role will involve developing and integrating machine learning models for species identification, crucial for our robotic device, the DiversityScanner, which is designed for sorting and classifying insects. Tasks span from image annotation to model optimization and deployment. You'll work with Python and ML frameworks and have the chance to engage in GUI development. This position is ideal for those keen on merging technology with conservation, providing practical experience leveraging computer science for biodiversity research.

#### Tasks:

- Development of Machine Learning (ML) and Deep Learning (DL) models aimed at identifying, detecting, and segmenting species within images. This includes the full cycle from annotating datasets to training and refining models for optimal performance.
- Integrate developed models and algorithms into broader systems/devices, potentially involving GUI development and containerization technologies like Docker.

#### Education, Experience, and Skills:

- Advanced knowledge in data analytics, machine learning, and deep learning and their application in image processing
- Programming experience with Python
- Problem-solving abilities with a capacity to drive projects independently.
- Hands-on experience with at least one ML framework (e.g., TensorFlow, PyTorch), with a good grasp of its application in image processing tasks.
- Experience in image annotation, along with knowledge of object detection and segmentation methodologies.
- Familiarity with GUI development, preferably using Python libraries

We are flexible in the choice of weekly working hours. The work can be carried out both on-site at the Campus Nord and in the home office.

For further information, please contact:  
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