

# PhD Candidate for Stress Detection among Employees

*Are you eager to contribute as a PhD candidate to the timely and effective detection of employees' decreasing resilience and rising stress levels? Do you enjoy collaborating with experienced researchers and professionals within this field? If so, we are looking for you!*

## **About the Research**

DESTRESS is a large Dutch consortium project on stress and resilience in the workplace, funded by a National Science Agenda (NWA) grant from the Netherlands Organization for Scientific Research (NWO; see <https://www.destress-project.nl/>). The multidisciplinary public-private DESTRESS consortium includes various scientific institutions, such as Amsterdam UMC, Radboud UMC, Radboud University, Vrije Universiteit Amsterdam, UMC Utrecht, TNO, Hanze University of Applied Sciences Groningen, University of Groningen, Heidelberg University, and several private and social partners.

## **Why DESTRESS?**

Stress poses a significant threat to the health of employees as well as the health of the organizations they work for. The resilience of employees and organizations is interconnected; an organization can only be resilient if its employees are. The key question is whether we can identify and address rising stress levels and decreasing resilience effectively and in a timely manner. Current methods for managing stress in employees and organizations are often ineffective as stress is often noticed too late, and there is usually limited shared problem ownership between employee, employer, and occupational healthcare provider. Additionally, the sources of stress - whether from personal life, work, or both- are often not identified early enough.

## **Project aims**

Destress aims to solve these issues with a consistent approach that integrates the perspectives of the employee, employer and occupational healthcare professional. The project focuses on the detection of stress at an early stage and uses artificial intelligence to identify early stress signals from individuals and their environment in a safe and responsible manner in order to facilitate a collaborative dialogue between employee, employer, and occupational healthcare professional. In order to reach this aim, the project will investigate how and to what extent the mental health of employees can be measured and predicted using consumer wearables and digital diary methods (EMA/ESM). Advanced data analysis techniques (e.g., machine learning) will be used to develop algorithms that contribute to the creation of a model for "dynamic stress profiles."

The research is grounded in psychology and health sciences but strongly intersects with data science, artificial intelligence, physiology, and health technology.

## **What you will do**

As a PhD candidate, you will conduct research, collect and analyze data, publish scientific articles, and present your findings. You will also collaborate in a multidisciplinary team, supervise students, and occasionally contribute to teaching. Over four years, you will be trained as an independent researcher and develop your academic and professional skills through training and workshops. Your tasks will include:

- Setting up large-scale data collection among employees.
- Analyzing data using tools such as Python or R.
- Publishing scientific articles and completing your dissertation.
- Collaborating with students, researchers, and professionals.
- Contributing to teaching activities.

You will work partly in Groningen, while data collection will take place nationwide.

## **Where you will work**

You will work within the research group "Digital Transformation," which is part of the Marian van Os Centre of Expertise in Entrepreneurship of the Hanze University of Applied Sciences in Groningen (HUAS). The project aligns with HUAS' mission to contribute to a healthy and active society and to the digital transformation.

This project involves close collaboration with the Donders Institute for Brain, Cognition, and Behavior and the Radboud University Medical Center in Nijmegen (Prof. Dr. Erno Hermans). The Donders Institute provides an inspiring research environment with a renowned graduate school and expert courses. Research on stress and mental health is a key focus area of Radboudumc. Additionally, you will collaborate with the Human Performance Department of TNO (Dr. Koen Hogenelst).

## **What we ask of you**

We are looking for an enthusiastic and analytical researcher who works independently, excels in communication (in both Dutch and English), and easily builds a network in a multidisciplinary environment. You have a passion for teaching, preferably in higher education, and are willing to work at least half of the time in Groningen. Furthermore, we require:

- A master's degree in relevant fields such as psychology, AI, data science, or health sciences (a research master is a plus).

- Experience with quantitative research and analyzing datasets using Python or R.
- Affinity with topics such as quantified self and health monitoring data.

#### **This is what you get in return**

A challenging position within an enthusiastic and collegial network of partners of the DESTRESS network. To support your development as a researcher, you will be guided by an experienced team of supervisors, affiliated at the Hanze University of Applied Sciences, Radboudumc and TNO. You will follow a personalized PhD training program (30 ECTS) within the graduate school of Radboudumc. What else do we offer?

- A one-year contract with the possibility of extension up to 4 years.

#### **Curious to know more?**

If you want to know more about this position, you can contact Hilbrand Oldenhuis, professor Digital Health at the Hanze University of Applied Sciences : [h.k.e.oldenhuis@pl.hanze.nl](mailto:h.k.e.oldenhuis@pl.hanze.nl), +31 (0) 595 3305. Please do not use this email address for your application (click on Apply-button).

#### **Will you become our new colleague?**

Then send your resume and motivation, **written in English**, via the application button.

- Closing date is: **05/02/2025**.
- Interviews will be on: **Wednesday afternoon, 12 February 2025**.
- We ask new employees to apply for a Certificate of Good Conduct (VOG) upon commencement of employment. The costs for this will be reimbursed by Hanze UAS.

*Acquisition in response to this vacancy is not appreciated.*