**Master Student in** **optoacoustic sensor development (f/m/d)**

The **Chair of Biological Imaging** (CBI) at the **Technical University of Munich** (TUM) and the Institute of Biological and Medical Imaging (IBMI) at Helmholtz Munich are an integrated, multi-disciplinary research structure. Together they form the cornerstone of a rapidly expanding bioengineering ecosystem in Munich, Germany; including the Research Center TranslaTUM and the Helmholtz Pioneer Campus, which integrate bioengineering with oncology and metabolic disorders, respectively. CBI scientists develop next-generation imaging and sensing methods to measure previously inaccessible properties of living systems, hence, catalyzing breakthroughs in biology, medicine, and the environment. Comprising 11 inter-disciplinary laboratories and scientists from more than 25 countries, CBI offers state-of-the-art infrastructure for innovative research and a perfect environment to accelerate your career.

**We now seek a highly qualified and motivated Master Student (f/m/d) for the design and testing of the novel optoacoustic sensor components.**

**The Mission:**

Our research is driving innovation at the interface of engineering and medicine, innovating imaging and sensing technologies based on optical and acoustic contrast with a tremendous potential to revolutionize early diagnostics, guided intervention, and management of disease. Optoacoustic imaging and sensing generate structural and functional information about healthy and diseased tissue at unprecedented depths inside organisms. Building upon our extensive expertise in developing methods and systems, we are now focusing on the clinical translation of our technology.

The successful candidate will contribute to the design and testing of novel optoacoustic sensor components. The research content includes mechatronics system design, experimentation, and data analysis.

**Your profile:**

* Background in related engineering fields (preferably Mechatronics, Mechanical, Electrical, Electronics or Biomedical)
* Motivation for hands-on work
* Dedication, autonomy and self-motivation to achieve goals
* Wish to work in an interdisciplinary environment
* English proficiency (written and spoken)

The following is considered advantageous:

* Knowledge on heat transfer
* Experience in MATLAB, Solidworks, Arduino
* Familiarity with PID Control

Your application:

We are looking forward to receiving your comprehensive application including your letter of motivation, CV, and academic transcripts of records preferably in English and in a single PDF file, via email to [cbi.recruitment@tum.de](mailto:cbi.recruitment@tum.de). Please indicate “Master Student in optoacoustic sensor development” in the subject line.

To promote diversity, we welcome applications from talented people regardless of gender, cultural background, nationality, ethnicity, sexual identity, physical abilities, religion, and age.” with “As an equal opportunity and affirmative action employer, TUM explicitly encourages applications from women as well as from all others who would bring additional diversity dimensions to the university’s research and teaching strategies.

For any questions, please contact:

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