



Opportunities  
for Talents

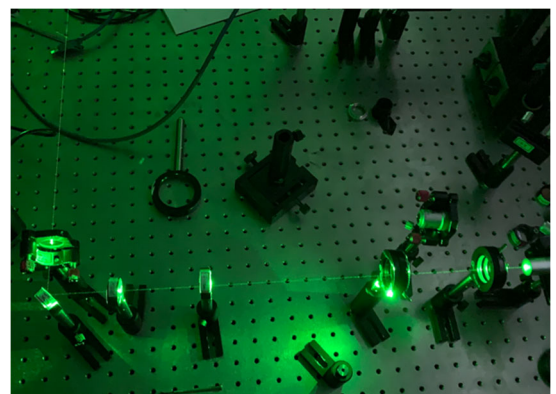


Technische Universität München

Der Lehrstuhl für Brau- und Getränketechnologie der Technischen Universität München sucht zum nächstmöglichen Zeitpunkt

## eine/n Studentin/en für Bachelorarbeit/Masterarbeit

As part of the "Artificial Intelligence in Lasers" research project, an instrument is being developed that uses algorithms based on optics and artificial intelligence to evaluate milk products. The device can determine the complex modulus, protein concentration, and particle size distribution of fat and protein in a non-invasive manner. The methods developed in this topic are significant in the characterization of fluids in many areas.



### ZIEL DER ARBEIT:

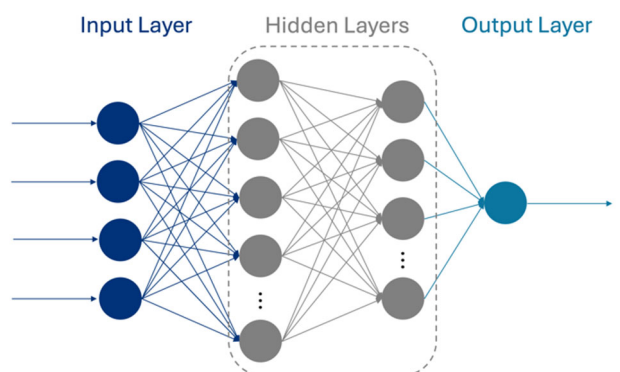
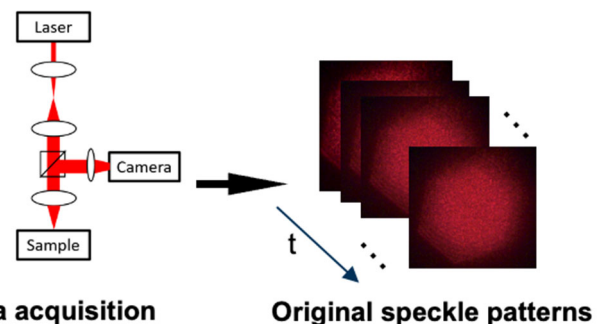
- Prepare different samples to simulate different milk products
- Improve the optical setup for the laser measurement system
- Employing the Deep Learning method to overcome the impacts caused by the sample concentrations
- Signal evaluation and processing

### METHODEN:

- Sample preparation
- Data Acquisition
- Imaging processing
- Deep Learning

### ANFORDERUNGEN:

- Willing to learn simple optics and Artificial Intelligence Theories
- Goal-oriented and independent working style
- Strong hands-on skills



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