



# SAGAR WADKE

Mechanical Engineer

## Personal Information



03/04/1995



Goethestraße 31, Wedel, 22880 Germany.



German (B1) | English (C1) | Hindi | Marathi



+49 15753652948



sagarwadke03@gmail.com

## Programming Skills



C / C++



Python



R Programming



MATLAB

## CAD & CAE Skills



SolidWorks



SpaceClaim



Creo



AutoCad



ANSYS Workbench & Fluent

## Other Skills



SAP



LATEX



JIRA



Confluence



MS Office  
(Excel, Word & PowerPoint)



Adobe  
(Illustrator & Photoshop)

## PROFILE SUMMARY

Mechanical Engineer with 3+ years of experience in the design, fabrication, and developing high-precision optical measurement and manufacturing systems. Strong background in design, tolerancing, and manufacturing processes. Proficient in camera calibration, image processing, system integration, and data analysis. Effective in international, high-pressure environments, consistently delivering optimized solutions for performance, cost, and quality.

## PROFESSIONAL EXPERIENCE

### Oct 2022 - Present Working Student, Image Quality

Trioptics GmbH (Jenoptik AG).

- Contributed to **product design** and **development** for **MTF** measuring systems in **Visual, UV, MWIR and LWIR** spectrum for ImageMaster Universal and Afocal series
- Designed and validated **proof-of-concept** for an **advanced intrinsic camera calibration** performance and **distortion** measuring system.
- Prepared **programming scripts** for measurement of samples, in-house **calibration** and **testing** of devices used in production.
- Automated** certification and **documentation** workflows with **Excel VBA and Python**, cutting documentation time **by 75%** and boosting efficiency.

### Feb 2019 - Feb 2020 Quality Engineer

Paras Space and Defence Technologies Pvt Ltd (Optics Division).

- Performed **optical metrology** on products such as **aspheric, diffractive, and asphero-diffractive** lenses, **gratings**, and **mirrors** preparing detailed final reports.
- Collaborated** with **cross-functional teams** in **machining, polishing, and coating** to optimize the manufacturing workflow and ensure smooth production.
- Developed an **algorithm in Excel** to automatically validate product parameters, resulting in **zero defects** and significant **time savings**.

## EDUCATION

### 2021 - 2024

#### MSc. Mechanical Engineering and Management

- Hamburg University of Technology
- Specialization: Product Development and Planning
- 1.8

### 2013 - 2017

#### B.E. (Mechanical Engineering)

- University Of Mumbai
- 2.0

## ACHIEVEMENTS AND EXTRA CURRICULARS

- Successfully lead a multidisciplinary team to develop a concept for Automated Rotor House Fastening robot sponsored by Siemens Gamesa under the Fishing for Experience program organized at TUHH (2024)
- Secured first place in innovation workshop for developing innovative care concept for cows suffering from digital dermatitis (Mortellaro) at TUHH (2023)
- Successfully lead a team of international students to solve European Consortium of Innovative Universities Water Challenge. (2022)