

Technische Universität Braunschweig | Institute of Machine Tools and Production Technology Langer Kamp 19b | 38106 Braunschweig | Deutschland

Recommendation Letter Mr. Lokesh Patel

To whom it may concern,

Mr. Lokesh Patel worked as a student researcher at Institute of Machine Tools and Production Technology (Chair of Sustainable Production and Life Cycle Engineering) of Technische Universität Braunschweig from 23 January 2019 to 24 June 2019. Priority was given to his master thesis in the field of the learning factory under the leadership of my research group.

The learning factory (»Die Lernfabrik«) of Technische Universität Braunschweig, in direct cooperation with industry, enables application-oriented research and practice-oriented teaching in the engineering sciences and in industrial further education. With around 80 scientific employees, the institute is one of the largest institutes of Technische Universität Braunschweig.

As part of the internationalization of our learning factory, we are working closely together with our long-standing Indian partner from Birla Institute of Technology and Science, Pilani. The joint project »JIngel – Joint Indo-German Experience Lab«is funded by German Academic Exchange Service (DAAD). Mr. Patel's stay has been supported by this project.

During his stay, Mr. Patel essentially took over the following tasks in his research work:

- Research in the field of self-directed learning in the engineering sciences
- Conception and adaptation of modular production systems for action-oriented learning
- Development of graphical user interface for integration of modular production system into academic education
- Research on Festo motion controllers, Festo PLC and Siemens PLC (Simatic S7-1200 & S7-1500)

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- Ensuring compatibility after integration of Siemens PLC into Fridge Demonstrator
- Documentation of the conducted research and practical work.
- Presentation of the research work to scientific staff and researchers

With his extensive and well-founded specialist knowledge, he has always achieved good success. He was motivated and showed a high degree of initiative and motivation. He worked efficiently and carefully and demonstrated good organizational skills within his team. Even during high workloads, Mr. Patel proved to be a resilient employee and proceeded in a deliberate, calm and goal-oriented manner. His work results were always of very good quality. Mr. Patel has met our expectations. We were very satisfied with his performance at all times. Mr. Patel has always been exemplary in his dealings with superiors, employees and other students and has been able to make a major contribution to breaking down cultural barriers.

Mr. Patel will leave our institute after expiry of the agreed period.

We thank Mr. Patel for the excellent cooperation and regret very much to lose him as a student researcher. We wish him all the best and continued success in his future career and life.

Yours sincerely,

Prof. Dr.-Ing. Christoph Herrmann