**Letter of Recommendation**

I have been working with Navdeep Singh since he joined John Deere Technology Center India in 2016 as a Graduate Engineer Trainee. He joined our project as a software developer when AUTOSAR was relatively new to John Deere. The project requirements and implementation were pivotal and complicated because this project was intended to impact the work of all product teams by replacing John Deere legacy operating system with AUTOSAR for new generation ECU’s. We were completely new to AUTOSAR and we were not having any experts in this field. Navdeep is having great learning and exploring capabilities due to which he got any expertise to decipher complex system and made many Software applications for automating the complex AUTOSAR chain. I worked with navdeep from the very beginning of the project and trained him to use system engineering concepts and UML modelling for documentation.

Navdeep has always demonstrated great leadership qualities in understanding and gathering requirements and has built very efficient tools for the adoption of AUTOSAR rapidly because of his passion and keenness in learning different programming languages. He is one of the best programmers I have ever worked with and his in-depth understanding of programming concepts has made him win many awards and badges in John Deere. He has an expertise in designing and architecting the complete software by analyzing and examining the future needs and has built the applications that are testable and scalable.

As we started working on building applications for converting John Deere ECU models to AUTOSAR models, he showed great enthusiasm and responsible acumen for understanding the complex systems. We worked closely with product teams to understand the requirements and gaps and developed the tools as per the feedback from the teams which helped us to keep the alignment of our deliveries with teams’ requirements. He represented as lead from India for this project development tools and has shown great results over the past 3 years. He has been praised by all platform teams and leadership for creating the smart software tools which drastically improves the quality, efficiency and productivity.

During the last 3 years he has developed the skills which him expert in advance programming’s and tools like C#, MPF, Mvvm and Magic Draw. He has given internal team training on the development of tools and architecting a scalable system. He is very hardworking and has worked parallelly in India as well as US times and has helped John Deere to achieve its high-end tasks. Moving from Svn to GitHub required knowledge and efforts of creating initial setup to be created and he worked great in learning and implementing the base web pages for our project and created the features for users to report the issues with tools and project online.

His proactive participation in technical discussions and brainstorming sessions demonstrate his belief in sharing knowledge openly. I have trained him on important topics like System Engineering, Modelling in Mafic Draw and AUTOSAR systems. After understanding the fundamentals of technical topics, he disseminates knowledge to his colleagues and conducts trainings in his department. I helped him in defining content for the LET’s Conference 2019. This helped him to develop a mindset of tailoring presentations to the audience. Navdeep and I had also submitted paper in “*HACKATHON*” Event for Automation in Magic Draw which got selected for presenting that to the committee

Navdeep and I had decrypted many AUTOSAR files. He has a knack for understanding complex systems by breaking them down into pieces, identifying their purpose and analyzing them thoroughly. His spirit for constant improvement and thinking deeply differentiates him from the others. He conducts himself professionally, communicates well, and possesses a well-rounded engineering skill set. It is therefore with great pleasure that I offer my endorsement of Navdeep for graduate studies at your esteemed institution to enable him to pursue his goal of doing research.

Regards,

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