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LETTER OF RECOMMENDATION

To whom it may concern

I am very pleased to recommend Ms. Vedaanti Baliga who has completed her 6-month final year undergraduate (B. Tech.) project as an intern under my supervision at the Indian Institute of Technology Delhi (IITD). I have learned that Ms. Baliga's project work was highly appreciated by her professors who evaluated her during her University exam. This also corresponds to my grading for her work and confirms my opinion regarding her capabilities. She further worked as '**Project Assistant (Tech)**' in contractual capacity from August 2019 to May 2020.

For a development of a web-based "contaminated site assessment tool" along with my colleagues at TU Dresden (Germany), I was in a look for a CS-IT student. Ms. Baliga was recommended to me through a colleague from her University. Besides maintaining over 90% CGPA in her course works, I found that Ms. Baliga had experience with the software development of a Water Resources (Irrigation) Project and she had sufficient depth in independent computer programming with different languages. Our project required schemes for data-base management, computing and analysis, visualization and code-optimization for web-based implementation. Furthermore, our project was to use open-source technologies only. She started from a scratch and thus it was a big challenge for Ms. Baliga.

As we chose Python-language based development, Ms. Baliga essentially helped us decide on a web-development framework (Flask) and then used several Python-libraries (Pandas, Numpy, Scipy, Matplotlib, Plotly etc) and MySQL for the backend development and HTML/CSS/JavaScript for the front-end development. I am very glad to inform you that Ms. Baliga has also deployed this project on the IITD server, which is now available and can be accessed at www.cast.iitd.ac.in . The source code (creative common licensed) is now available at GitHub (<https://github.com/CAST-IIT/CAST>).

It surely was a challenge for Ms. Baliga to independently and alone (as we all are not from CS-IT background) bring this project to a logical conclusion that we intended. During the process Ms. Baliga developed skills to communicate with non-CS/IT workers, seek help and collaboration from her teachers, my colleagues (from CS/IT background) and several groups of students. I clearly find that she has learned far many inter-personal communication tricks.


Ms. Baliga was regularly required to present her works. This was required for us to share the progress of the work with our international partners, but for Ms. Baliga to realize the importance of deadlines and more importantly improve her presentation skills. I may safely say that Ms. Baliga is now very matured with these skills. My colleagues Prof. R. Liedl (TU Dresden) and Prof. C. Werth (Un- Texas, Austin) shares my opinion. Perhaps these skills/exercises were helpful for the oral defence of her project. I have learned that she was one of the best presenters among her classmates.

We are finalizing the research paper of this project where Ms. Baliga is the third author and continues supporting us with these works. Also, she is voluntarily supporting my team with the few additional software developments works that we consider is essential for the usability of the developed tool.

During our project Ms. Baliga was challenged in many aspects: an independent workload, international (academic) collaboration and time difference (India-Germany-Texas), language and presentation skills and inter-cultural sensitivities. She surely made it. Her English language skills, definitely much above the average for non-native speakers, was mostly not an issue for us. She has clearly improved on all other fronts. I think she is ready for bigger challenges.

In particular Ms. Baliga has been interested in Data-Science field within CS/IT. Our project only offered a small challenge with Data-Science but it did help her understand how to manage data and usefully visualize them. I think she can extend to what she learned from us.

I am very sure that Ms. Baliga will be a successful computer engineer or scientist. I am absolutely in no hesitation to recommend her. Please feel free to contact me for further information.



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