C/. Jordi Girona, 29
Edificio Nexus II, 3ª planta
08034 Barcelona
Spain

Barcelona, 05 September 2018

To Whom It May Concern,

As the group manager of the department of Computer Application in Science and Engineering (CASE), I would like express my appreciation towards Sanath's work in Barcelona Supercomputing Centre as an intern from 1st Feb 2018 - 30th June 2018.

I have known Sanath since August 2016 and during his time in BSC, he has been involved in working on a very new and novel method for solving partial differential equations on polygonal and polyhedral meshes called the Virtual Element Method. He has been involved in implementing this new method into the in-house parallel Multi-physics code Alya, which is a multi-physics simulation code specifically designed to run efficiently in parallel supercomputers. The main goal is to contribute to the better understanding of Virtual element method and its implementation for certain basic problems on a large scale.

Sanath has contributed to our organisation in the form of implementing certain Virtual element solvers for basic equations that can be used for a wide range of problems. He has a profound inclination towards this field and has a good understanding of the fundamentals. Through a rigorous review of literature, he was able to make commendable progress in a very short span of time. Sanath has manifested a very good knowledge of the high level of scientific curiosity and a very strong aptitude for solving practical problems. Sanath showed the capacity to assimilate a complex problem into small components and to deal with each component in a rigorous quantitative manner. I was impressed in his ability and drive to undertake a topic that is very new and different with an emphasis on technical accuracy. In my regular meetings and discussions with him, he puts across his ideas very eloquently. Sanath highly prioritizes conceptual clarity and depth of understanding. He often comes up with questions that few others can. At personal level, Sanath has been working both independently and also with a research group by seeking out expertise, advise and direction from another scientist of the group as well as sharing the knowledge he acquired from his project.

I endorse Sanath's work and performance and give him an A grade for his work. Please don't hesitate to contact me for any further information.

Mariano Vazquez
High Performance Computational Mechanics Group Manager
CASE - High Performance Computational Mechanics
Nexus II - Planta 3 C/ Jordi Girona, 29 Barcelona 08034
Telephone: +34 934137907
Email: mariano.vazquez@bsc.es