



27th of January, 2022

To Whom It May Concern,

I am writing this letter to support Ahmad Noor Yaqubi's application for Ph.D. program and give my highest possible recommendation for him. I have known Ahmad through his graduate education in Sustainable Environment and Energy Systems Master Program at Middle East Technical University Northern Cyprus Campus for two years.

Ahmad is highly intelligent and has good analytical skills. By joining the program, he has been working as a teaching assistant in the Civil Engineering program for two years. He has assisted in several courses, including Fluid Mechanics, Hydromechanics, Hydrology, and Geographic Information Systems (GIS). He showed great enthusiasm and passion for learning. As a part of his responsibility, he has performed individual recitation sessions, laboratory experiments for pipe flow, open channel flow, and pump operation tests, and he has given seminar series for the students in the GIS course. He always likes to take responsibility for improving the course content with me and share his experience with the students to contribute their engineering skills.

Ahmad showed immense working discipline, competitive knowledge, particularly in hydraulics and water resources engineering topics. He has developed excellent skills to work independently with great creativity and enthusiasm. To elaborate further, he is currently working on a flood risk management project that I am also involved in, which is funded by the local authorities. This project aims to reveal a safe and economic flood risk management system for mitigating the flood risks in the town of Dikmen in Kyrenia, Cyprus. As hydrologic analysis, he analyzed the historical meteorological data and performed a set of rainfall-runoff simulations for different occurrence probabilities by using HEC-HMS software. He used his GIS skills to extract the required input data to the hydrologic model and the flow hydrographs were obtained for the hydraulic models. As hydraulic analysis, he modeled the urbanized study area considering streams, buildings, and other different land covers by employing a two-dimensional HEC-RAS model, and he calibrated the hydraulic model based on the observed flood map. Based on the Flood Directive of the EU, he developed the flood hazard and flood risk maps of the study area for different return periods. These results were presented to the project owners as a technical report. Using the ArcGIS software, he prepared the maps that show the flood inundation extend, flow depths, flow velocities, and finally, the flood hazards and risks. Currently, he is working on alternative structural and non-structural



remedial measures to reduce the potential consequences of flooding events. His effort in the project group as a team member is outstanding. It reflects a level of insightfulness and attention to detail. In addition, his confidence and eagerness to learn, and his pleasant personality made a good impression on me.

I can clearly state that I believe he has outstanding potential. Therefore, I strongly recommend him for admission to your Ph.D. program. Please do not hesitate to contact me for more information.

Hasan Zaifoğlu

Assistant Professor
Civil Engineering Program
Middle East Technical University
Northern Cyprus Campus
Email: zhasan@metu.edu.tr