Name of the MSC Fellow: Jan Tomec
Nationality: Slovene
Host organisation: University of Rijeka, Faculty of Civil Engineering
Country of the Host: Croatia
Project Acronym: THREAD
Project start and end date: 01.10.2019 – 30.09.2023
Type of MSC action, H2020: ITN

Your story:
Project objectives and research field:
The goal is to obtain efficient and long-term stable algorithms for numerical integration of non-linear beams in dynamic analysis of certain slender structures. The system is also subjected to high frequency vibrations and contacts.

Tell us why your topic is important and/or how it brings to advancement in your research field:
Being at the beginning of the research I can speak only hypothetically about the possible implementations. However, I believe this work will improve the ability to simulate high-performance parts in industry and enable enhanced prototyping. This results in reduced costs and improved efficiency and performance of the designed components. Academically, our work will deepen the knowledge about slender structures and the mechanical analysis of them.

What are the benefits of participating in an MSC action?
In addition to excellent working conditions and international experience, the main benefit is obtaining the PhD. Although I am still at the beginning of my research, I can see that in the end, I will have much deeper academic knowledge of numerical analysis and non-linear mechanics. I also hope to extend my social network with my international colleges with some of whom I might also work in the future. Such multidisciplinary international groups of young scientists greatly benefit the wider society by interconnecting our countries with new ties.
Did you encounter any challenges during application/implementation and did you get any help?
I did not encounter many challenges, although I admit that there is too much paperwork. I received a lot of help from my host institution. They helped me with all the formalities and necessary forms. I also had the inconvenience of applying during the start of the COVID-19 pandemic and had some additional difficulties regarding national regulations as well.

Why did you choose a widening country as a Host? What was the reason that convinced you? What is making you professionally happy here?
I chose it because I was very interested in the topic. This was my primary reason. Living in Croatia has other benefits as well like beautiful nature, warm climate and clear sea.

Would you recommend others to apply? What useful advice/tips can you give them?
Yes, I would. This is an excellent opportunity to expand one’s horizon by experiencing living and working abroad. I give to everyone the same advice. Start to work in your field as soon as you can by participating in different activities. Working as an intern, researching and promoting science will give you a lot of desirable experiences.