

Martelaarslaan 76,  
Gent, 9000  
Belgium

April 18, 2022

Dear hiring manager,

I am excited to apply for a job requiring a Civil Engineer specialized in Structural health monitoring . I am writing this general cover letter for a company offering structural health monitoring services either for itself or other companies. I believe my skills related to the mentioned job position provide a significant advantage for increasing the safety and decreasing OPEX of the target assets. I'm thrilled at the opportunity to bring my unique style and passion for condition-based maintenance.

As the Ph.D. researcher at Ghent University of Belgium, I was working on fatigue crack and corrosion monitoring in steel structures. Before that, in my home country, where the big concern for civil structures is dynamic earthquake loads, I worked as a chartered civil engineer for the stability design of steel and concrete structures according to relevant standards. In addition to engineering activities, I am interested in research and development too. For instance, when I was an M.Sc. student, I developed a meta-heuristic algorithm and consequently wrote a scientific paper that now has 585 citations, see my google scholar. During my Ph.d., I also developed a new data processing procedure for damage characterization.

During my Ph.D, I developed two innovative SHM concepts for damage detection, localization and characterization. As for fatigue crack monitoring, I worked on the electromechanical impedance method. I performed sensor installation, Matlab-based data post-processing, and FE modeling of complex interactions between piezoelectric transducers and the host specimen. I also have experience in Python since the developed artificial neural network for image-based corrosion detection was written in this programming language. I was also the counselor of six M.Sc students during this research period. I am open to learn new skills and flexible to work on other topics.

Thank you for your time and consideration. I'm looking forward to hearing from you. Growth is essential to my continued success, and I'm excited for the chance to be a part of your company.

Sincerely,

Mojtaba Khayatazad