

## Personal Statement

I have been working as the Shinkansen railway vehicle engineer and gained practical skills in engineering field such as problem solving, measurement, analysis, designing, research, evaluation etc. However, I realised that if I get a set of skills of management, I can carry out more large projects more efficiently and also provide my colleagues good working environment. Therefore, I am keen on the field of engineering project management.

During my undergraduate and post-graduate study, I have acquired a fundamental knowledge and practical research skills in the field of mechanical engineering. As my research activity, I collaborated with the Railway Technical Research Institute under the linking programme of the university and contributed to developing a new optimisation method for designing aerodynamic shapes. This was a process for finding the best physical profiles in view of aerodynamics whose new point was using experimental methods such as wind tunnel testing instead of calculation using computers which costs a lot. I made demonstration experiments for proving this new method a success by using self-developed deformable wind tunnel model which designed with my knowledge which was acquired in fundamental basic modules such as mechanics of materials, and my own creativity. Finally, the optimisation method was patented and I was recorded as one of the inventors. As a result, not only the engineering skills but also some practically learned techniques of negotiation with professionals such as engineers of The Japan Aerospace Exploration Agency who granted me to use of their patented technology.

Ten years' experience as a rolling stock engineer gave me opportunities to apply the academic knowledge to actual business fields, managing teams, and also awakened me about the importance of management skills. One of my best experiences was the project for life extension of heat exchanger's filters for HVAC (Heating, Ventilation, and Air Conditioning) units installed in Shinkansen rolling stock. To extend the replacement cycle, a verification test was required to prove that the life-extended filters were not affecting the HVAC's performance. However, there were no filters which used extended period. Thus, we surveyed used filters and evaluated with collection efficiency and pressure loss, the two main indexes of air filters and calculated these criteria of life-extended filters.

コメントの追加 [RC1]: The = only one?

Perhaps 'a'

コメントの追加 [RC2]: If you mention skills on their own in one big list, it's less credible. Mention skills one or two at a time, next to the specific examples of things you did.

コメントの追加 [RC3]: Don't use 'etc', it makes your

コメントの追加 [RC4]: 1) This is almost the brief

コメントの追加 [RC5]: Remember to include the

コメントの追加 [RC6]: Through my... I have

コメントの追加 [RC7]: To avoid repetition of

コメントの追加 [RC8]: Necessary?

コメントの追加 [RC9]: Why not just 'developed a'?

コメントの追加 [RC10]: This seems like repetition of

コメントの追加 [RC11]: The computer calculation

コメントの追加 [RC12]: demonstrated

コメントの追加 [RC13]: the success of this new

コメントの追加 [RC14]: self-developed = designed by

コメントの追加 [RC15]: If you're trying to make the

コメントの追加 [RC16]: This formula of 'not

コメントの追加 [RC17]: Learned, perhaps?

コメントの追加 [RC18]: techniques

コメントの追加 [RC19]: While you say 'as a result' I

コメントの追加 [RC20]: You have been working for

コメントの追加 [RC21]: This is repetitive. How about

コメントの追加 [RC22]: One highlight

コメントの追加 [RC23]: Or 'would not affect' ?

コメントの追加 [RC24]: To calculate criteria for life-

Then we created “dummy life extended filters” and performed verification test with these filters. The project ended in success and I utilised my academic skills as well as negotiation skills to a manufacture which provided us its testing facilities. Yet as a leader of the team, I was reminded of the importance of specific management skills, namely how to manage time, budget, workforces, goods etc. If I managed more efficiently, the working time would have been compressed more and I could save members’ private time.

Therefore, I desire to study about project management, and the MSc Engineer Project Management course at The University of Manchester is extremely fit for me. For instance, ‘Management of projects’ is the one which I should have in my previous projects. Since I like to create something new for solution, ‘Innovation Management’ is necessary. I am sure that to discuss with a wide-range of students will deepen my thought and they will be the best partners in our following stages.

After graduation of The University of Manchester, I would like to join an international project which deploys transportation systems such as highspeed railway or more futuristic one such as the Hyperloop to the world. Then, in the long term, I would like to establish research and develop team to take measures about human extinction since there are no safety systems which can respond to the critical risk for humanity, nevertheless they are so precious existence in this ten-billion-year space history. For these my goals, I am looking forward to join your university to study about management.

コメントの追加 [RC25]: These “dummy life-extended filters” could be tested in facilities I negotiated with a manufacturer, and the project ended in success.

コメントの追加 [RC26]: Namely how to manage time, budget, and workforce.

コメントの追加 [RC27]: It seems you are trying the MBA application writing technique of  
-I did...  
-I learnt...  
-In future, I would do it differently as...  
This is fine, but remember not to be negative about yourself.

コメントの追加 [RC28]: This does not make sense, as ‘fit’ cannot be used in this way. ...

コメントの追加 [RC29]: Is it just a random example? ...

コメントの追加 [RC30]: This makes no sense. ...

コメントの追加 [RC31]: Is also interesting

コメントの追加 [RC32]: My future career

コメントの追加 [RC33R32]: Pronouns need to match ...

コメントの追加 [RC34]: Are these optional modules ...

コメントの追加 [RC35]: To avoid repetition, you can ...

コメントの追加 [RC36]: We could move the adjective ...

コメントの追加 [RC37]: around

コメントの追加 [RC38]: establish a research team? ...

コメントの追加 [RC39]: against

コメントの追加 [RC40]: You have chosen a big, bold ...

コメントの追加 [RC41]: I believe I commented on ...

コメントの追加 [RC42]: Joining ...

コメントの追加 [RC43]: You can remove this word ...

コメントの追加 [RC44]: Is this the bold ending ...