Neal Carr
Foundation Scientific Software Engineer
Met Office
Fitzroy Road, Exeter, Devon
Email: neal.carr@metoffice.gov.uk

Dear Sir/Madam,

I am writing to support my application for the Summer School on Effective HPC for Climate and Weather. I am currently employed as a software engineer for the Met Office, where I work to maintain and improve the UKCA (United Kingdom Chemistry and Aerosols) component of the Unified Model, the Met Office's current weather/climate forecasting model. I am also working to incorporate UKCA into the Met Office's in-development model, named LFRic, which will take advantage of the architecture of modern high-performance supercomputers.

Over the course of my work, I often run test suites of the Unified Model on the Met Office's in-house supercomputers, and I write new code to both add more functionality to the model and increase the model's efficiency on our machines. With this in mind, I feel the summer school, with its focus on techniques for working effectively in HPC environments, would be invaluable to my work at the Met Office. I am also confident that I will have the opportunity going forward to demonstrate and propagate the skills I will learn at the school, given my close working relationship with scientists and fellow software engineers, both in the Met Office or elsewhere through my connections with the wider UKCA community.

Regarding an academic group project, I am new to the fields of both climate research and software engineering, and so I do not feel confident in suggesting a particular project that would be suitable for the school at this time. I am, however, eager to develop my skills by assisting a group of fellow researchers/software engineers in implementing their ideas for projects. I hope that with my background in mathematical physics and my developing abilities as a software engineer, I can be a useful asset to any group project undertaken at the school.

Yours faithfully,
Neal Carr