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High Performance Computing Short Courses Consortium

**Ref. Autumn Academy for High Performance Computing
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To whom it may concern,

Firstly, I would like to thank you for providing this training and providing me with the opportunity to apply for a position within the course.

My PhD research contributes to a larger research project funded by EPSRC. The programme uses traditional structural engineering analysis tools (experimental testing and numerical simulation) to develop new contact and non-contact technology to estimate the mechanical stiffness, hysteresis and viscoelasticity of the human cornea in-vivo. Knowledge of these properties is expected to improve eye healthcare in a number of areas including measurement of internal eye pressure for glaucoma management, introduction of corneal implants in keratoconus, and planning of refractive surgery in myopia.

I am currently developing software tools for the analysis of data post testing and ex-vivo in Visual Basic language. The objective, to provide real-time, in-vivo analysis of test subjects, will require both efficient and sophisticated programming language. This training will assist the development of my skills in the areas needed to achieve this objective.

Yours faithfully,

Charles Whitford MEng