

February 13, 2023

500 Rubin Dr, Apt 1403  
El Paso, TX 89912, US  
Phone: 915-730-2550

Dear Sir or Madame,

My interest in SpaceX stems from my aspirations to develop personally and professionally in a fast-paced setting. I thrive in environments that challenge me to think creatively and exceed expectations to ensure a mutually beneficial relationship for myself and my employers. I believe that my qualifications make me an ideal candidate for the position. I am confident that it would be an extraordinary opportunity for me to grow both professionally and personally, and I would like to be part of your dynamic team.

Since graduating with a Ph.D. in Computational Science, I have worked for above four years as a parallel computing scientist for Los Alamos Nat. Lab. and Univ. of Texas at El Paso. In this role, I gained substantial experience in software development, coding in C/C++, Python, and Fortran, as well as identifying and fixing bugs. I am valued as a solutions-focused to software development and code optimization, using multiple supporting software tools to identify sections that require change, improve and optimize to performance faster and well scale. I have experience in all areas covered in your job ad, including:

- Experience in performance, and optimization to improve code efficiency.
- Strong background in numerical analysis, numerical linear algebra, and numerical ODE and PDE.
- Experience in mathematical modeling, computational methods for simulations.
- Experience high performance computing, performance optimization and scalability of parallel computer code .
- Strong background in parallel programming such as MPI, OPENMP, CUDA/HIP, SYCL, OPENACC, and KOKKOS.
- Experience with optimization and profiling tools such as TotalView, Score-P, MAP, TAU, HPCToolkit.
- Fluent in high-level programming languages (C/C++, Fortran, Python, and R).
- Experience using the following software packages: MATLAB
- Experience in software development, designed, developed and building new products using parallel computing.
- Strong interest in Machine Learning and I am familiar with PyTorch and TensorFlow.

My background includes a Ph.D. degree in Computational Science, MS in Applied Mathematics and BS in Physics. I have a full understanding of the lifecycle of a software development project. I also have experience in learning and excelling at new technologies as needed. Please see my resume for additional information on my experience. Thank you for your time and consideration. I look forward to speaking with you about this employment opportunity.

I look forward to your response. Sincerely yours,

Henry R. Moncada

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