Mario **Burbano**

CLOUD DATA ENGINEER AND ANALYST · PHD IN COMPUTATIONAL CHEMISTRY

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COMPANY *September 23, 2021*

CITY

SWITZERLAND

Cloud Data Engineer and Analyst

Dear Sir or Madam

My educational background is in the physical sciences. Throughout my career as a research scientist I relied on the power of computers and the data that they generate in order to elucidate and predict the properties of materials for energy storage and generation.

The domain of high performance computing, where I gained the bulk of my professional experience, leverages the power computer clusters connected via high speed networks in order to perform simulations of large and/or complex systems. My role as a researcher consisted of implementing algorithms to model battery or solar cell materials, then carrying out simulations from which data could be gathered, parsed and ultimatley interpreted within the context of their physical/chemical meaning. The final aspect, and crown achievement of this investigative process, was the communication of the results with the research community by way of scientific articles often written in collaboration with different teams. My published articles can be found on my google scholar page.

Since leaving the world of academic research I have been able to adapt my skills to Cloud Computing environments like Amazon Web Services and Google Cloud Platform. I have also extensive experience of Python which I have used in several contexts, for example as a wrapper/controller for low level language codes, as a tool for analyzing data with `pandas` and `scikit-learn`, as well as, a means to visualize data using `matplotlib`.

I am highly motivated by the developments in the field of Data Engineering, as they represent a tangible step towards a better understanding of the world around us due to the large range of environments where these methods are finding application. My interest in the field of Data Science is further motivated by the technical/theoretical challenges that this domain represents, for example in the development and implementation of new methods.

Leveraging the incredible promise of Data Science will be vital for businesses in the coming years as it will allow them to predict market trends in order to make better-informed decisions; Data Science will also allow companies to gain a deeper understanding of customers, identify problems in manufacturing processes and it could even in assist companies in the design of new products by harnessing the power of artificial intelligence. These are all very exciting developments and I would like to be part of this new wave of knowledge.

There are many more aspects to my diverse career that I have not shared here with you and that I can no doubt elaborate on should you do decide to contact me. Thank you for your time, I look forward to hearing from you.

Best Regards,

Mario Burbano

Attached: Curriculum Vitae