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Bayer  
Crop Science Division  
Chesterfield, MO, USA

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Dear Hiring Team:

I am writing in response to your advertisement for the position of Data Scientist in Computational Genetics at Bayer. I am a computational biologist with extensive experience in building statistical models and software for performing evolutionary and genetic analyses in plants. Bayer is seeking a candidate to join the Crop Science Division to develop analytics-driven product pipelines with genomic data, and I believe that my computational experience and skill set make me an ideal candidate for this position.

I am currently a National Science Foundation Postdoctoral Research Fellow at the University of Arizona under the guidance of Dr. Ryan Gutenkunst and Dr. Mike Barker working to develop evolutionary genomic models for polyploid crop species. Prior to this I earned my Ph.D. in evolutionary biology and B.Sc. in mathematics at The Ohio State University working with Dr. Andrea Wolfe and Dr. Laura Kubatko.

The primary focus of my research to date has been to understand the impact of genome doubling on genetic variation within populations. However, many bioinformatic tools do not accommodate polyploids, leading me to develop several statistical models and software packages for variant inference and analysis from low-coverage resequencing data (written in C++, Python, and R). More recently, I've also begun to use deep learning algorithms to analyze genotypic data encoded as images for the inference of hybridization and am interested in continuing to develop this knowledge in other areas of genomics.

As an academic transitioning to industry, I am particularly excited for the opportunity to use my training in software development and documentation, scientific writing and communication, and collaborative problem solving to work on a team dedicated to implementing computational pipelines focused on delivering business-oriented results and predictions.

In conclusion, I believe that my experience with statistical modeling, coding, and scientific scholarship make me an excellent candidate for this position, and I am excited about the prospect of applying these skills as a Data Scientist at Bayer Crop Science.

Thank you so much for your time and consideration.

Sincerely,



Paul Blischak, Ph.D.