From: Jake Bouma

**Subject:** Application for Senior Data Scientist Position

**Date:** May 20, 2017

## Dear Sir/Madam

I am an experienced, pragmatic and talented data scientist currently based in South Africa. In this letter, I hope to assure you in as few words as possible that I have the skills, personality and hunger for the position of Senior Data Scientist. Please head over to my LinkedIn page or reach out for a detailed CV if specifics are needed.

I am the best Python and SQL data hacker that I have encountered. I treat technology like maths, always pushing to understand the fundamentals – relational algebra over SQL, MapReduce over Spark RDDs, architecture over implementation – and as a result have a very high aptitude for technology. With a basis in Nuclear Physics, I'm equipped with the analytical thinking, linear algebra and statistics to do data science accurately and responsibly. I "get" (and love) data and the discovery of patterns within.

My latest position as Lead Data Scientist at a listed telecoms company in South Africa has been my first post building models at billion record scale. Initially the only data scientist / engineer, I built, loaded and maintained a big data platform based on modern trends in technology, namely:

- 1. Open technology with proprietary value adds (Spark, Hadoop+Hive, Jupyterhub+Conda)
- 2. DevOps and cloud native architecture to prototype quickly and deploy scalably (Docker with Rancher)
- 3. Agile project management to match the pulse of rapid innovation (JIRA)

I designed a novel semi-structured data model for the data lake (<3 parquet) and automated pyspark notebooks to lay down ETL pipelines integrating data from 9 group companies. To build machine learning models at scale, pyspark had to replace my beloved scikit-learn. The transparency of simpler models delivered easier to productionize results. I prototyped Neural Networks, but well-thresholded Tree Ensemble methods turned out to be our bread an butter for direct marketing applications.

Technical skills aside, I've gone through the growing pains of hiring and leading a small data science team, managing stakeholder expectations and delivering on open-ended use cases. My leadership style tends towards open but hard mentorship, with dogged emphasis on prioritizing value. I have been involved in big data strategy and technical decision-making throughout my career and keep a close ear to the ground for new innovations in data.

My reasons for wanting to move on are simple: I want to meet a new city, work in the A-league of data science and be closer to industry leaders (Continuum, Databricks, Domino, Docker, AWS). So what can I offer to your company that sets me apart from other Data Scientists? Creativity combined with aptitude, hard work and good fundamentals means that simply put, I will deliver.

Thank you for considering my application. I hope you will decide to reach out for an interview.

Regards Jake Bouma

