18 June 2020

Clearwater Analytics

Savannah Roberts / Emily Ballweber / Recruiter,

My name is Colton Grainger; I am a math Ph.D. student on leave from the University of Colorado at Boulder, having worked over the last year in the Data Engineering and Curation Section at the National Center for Atmospheric Research. My professional interests include wrangling messy data, modeling complex systems, and prototyping solutions to ambiguous problems.

In the wake of COVID-19, and because I want to contribute technical expertise to my community and hometown, Boise, I have decided to pivot in my career trajectory to take an **Technical Support Analyst** position at Clearwater Analytics beginning Summer 2020, rather than returning to graduate school on a teaching assistantship in the Fall.

My immediate qualifications to work on the Platform team at Clearwater Analytics include

1. over three years of scientific computing experience in various **programming, scripting, and query languages**;
2. a year of professional **data engineering** experience at the National Center for Atmospheric Research; and
3. background in **mathematics and data science** that would support me to respond to complex requests for technical support posed by Clearwater's employees.

For example, at NCAR, I worked independently under two project scientists on the reduction of meteorological data from binary image files using Python and SQLAlchemy. Starting from scratch, I designed a metadata schema and ingest system for a ~60 TB collection of scanned images to reduce each ~6 MB image to ~2 KB of meteorological time-series metadata, and I developed this workflow to completion over a year.

The value I could provide for the Platform team at Clearwater would be in (i) communicating openly, frequently, and enthusiastically with my peers and supervisors; (ii) insulating agile teams from low-level technical issues; and (ii) authoring self-explanatory documentation and insightful bug reports in response to service requests.

Given my limited experience in accounting, finance, or investment management disciplines, I should emphasize: As a Boise native making a career transition from pure mathematics towards software engineering, I have intense desire to learn and improve professionally over the next 5 years, and I am committed to quickly assimilating the necessary domain knowledge of accounting principles, investments, and securities if hired.

A selection of the technical areas I have *fluency* in is: web development (apache, nginx, pandoc, yst), scripting (bash, Perl), version control (git), Unix-like OS's (Debian, Ubuntu, macOS), tabular data (Excel, pandas), cluster/cloud computing (AWS, gcloud, Spark), relational databases (MongoDB, MySQL, NoSQL, PostgreSQL), and python3 (scipy, numpy, pandas, SQLAlchemy, unittest). I have *intermediate familiarity* with Java, C dialects, Windows, and GAAP/SAP.

Thank you for your consideration,

Colton Grainger