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Dear Accessible Teaching, Learning and Assessment Systems,

I am pleased to submit my application for the opening of *Data Analyst* at Accessible Teaching, Learning and Assessment Systems. This position is of great interest due to Accessible Teaching, Learning and Assessment Systems's mission to promote learning and improve outcomes for all students. I believe my skills in research, statistics, and disseminating findings, along with my desire to learn new skills can be beneficial to Accessible Teaching, Learning and Assessment Systems's mission goals.

As a Prevention Scientist, I am experienced in conducting quantitative research and program evaluation. I have worked on and led several research projects focused on inequities in specific populations. My experience teaching statistics and experimental design are reflective of my quantitative research skills. In my classes, students learned the importance of ethics in conducting statistics and creating an experiment. Students also learned how to create feasible research questions and hypotheses, utilize psychological theories, conduct comprehensive literature reviews, create a confidential survey using Qualtrics, conduct analyses appropriate for their experimental design, write a report of their findings, and prepare a presentation about their experiments for an academic conference. As a graduate student, I was the project coordinator for a community research project assessing food access in rural Oregon communities. I built strategic partnerships with community members which aided in the identification of key stakeholders and increased access to the inclusion of community members in survey and focus group participation. In addition to working with rural communities, I have collaborated with the local public health department to assess parents' knowledge of materials provided to children promoting health behavior change using the evidence-based program CATCH.

Aligned with the responsibilities of the position, I have advanced competency using R for the past 4 years for analyses; both inferential statistics and machine learning. I have several years of experience conducting inferential statistics, including methods such as spatial regression, structural equation modeling, and multi-level modeling. I have used inferential statistics to answer research questions about psychometrics of measures, adolescent and adult health behaviors, food access in rural Oregon, and other topics through published peer-reviewed journals and poster and paper presentations at regional and national conferences. Through these mediums, I have used inferential statistics to discuss the relevance and potential implications of findings to audiences of academics and practitioners (example presentation here). While being primarily trained in inferential statistics, I have sought out courses and a specialization in data science to learn more about machine learning. Through these data science courses, I have learned data wrangling, data visualization, dashboard and report creation, and machine learning algorithms in R; however, during my personal time I have been teaching myself these topics in Python.

In addition to my experiences using R and Python for modeling purposes, I am proficient in R to create visualizations of analytic findings using dashboards and reproducible reports. Currently, as a Data Science Academy Mentor for RStudio I have been working with industry professionals to develop skills in data visualization, data manipulation, modeling techniques, and dashboard/report creation using R. I am competent in creating dashboards using the Flexdashboard and Shiny R packages. While different from Tableau and other software, both packages allow for a great deal of customization. In collaboration with the Vice Provost of University of Oregon's Graduate School I created a dashboard using growth models to examine if increasing graduate teaching employees as instructors improved undergraduate student success. Other dashboards I created include a shiny app examining program perceptions of graduating graduate students and a shiny app to show the influence of overfitting a model to training data.

With a background in academia, I am likely to be quite different from other applicants; however, as a lifelong learner, I am eager to learn more about the tools used in industry positions. I am constantly researching more about new analytic techniques or other programming skills through books and online resources. Additionally, I have sought out resources to become competent in using SQL for database management; however, I am enthusiastic about utilizing concepts I have learned with more complex queries.

I believe I can be a great asset to Accessible Teaching, Learning and Assessment Systems with my expertise in research,

statistics, and disseminating findings. This opportunity will augment my current experience, knowledge, and skills by learning how to apply my skills with education and assessment data. Thank you for your consideration.

Best regards,

Jonathan A. Pedroza (JP), PhD