Data Science - Research Assistant Positions - Spring 2022
Rate of pay: $20/hour, 10 hours/week for 26 weeks

We are currently seeking applications for multiple research assistant positions in the Department of Mathematical Sciences at Purdue University Fort Wayne for the 2022 Spring Term, to work under the supervision of Prof. Alessandro Maria Selvitella (Webpage - Google Scholar). These positions will support research in Prof. Selvitella's lab that focuses on developing new data science, machine learning, and mathematical methods for the study of: (1) infectious diseases (e.g. COVID-19), (2) neuroimaging (e.g. fMRI), and (3) organismal biology (e.g. ecomorphology of primate bones). These positions fit into the many activities of Prof. Selvitella's lab in the area of data science including: Thematic Program on Data Science and COVID-19 2020-2021, the Data Science Week 2020 and Data Science Week 2021, the Data Science and Machine Learning Seminar Series, the project-based courses Data Science Methods in Epidemiology Part I and II and Introduction to Neuroimaging I, The Workshop in Mathematical and Computational Biology, and The Mathematical Laws of Morphology and Biomechanics Program.

The research assistants will lead their own research projects under the supervision of Prof. Selvitella and will have the opportunity to work jointly with other students in Prof. Selvitella's lab on other projects (if interested) and to interact with Dr. Selvitella's collaborators. All of Prof. Selvitella's activities are grounded in Equity, Diversity, and Inclusion, as well as collaboration, interdisciplinarity, and community impact. Students with the most diverse backgrounds are invited to apply for the positions and will enrich the research activities of the lab.

Preferred Qualifications
- Excellent written and verbal English language communication skills.
- Background in data science and/or in one among (1) infectious disease modeling, (2) neuroimaging, (3) morphology or biomechanics.
- Strong collaborative skills for working well in a team environment.
- **High Proficiency in statistical software (e.g. R, Python, Matlab)**.

Responsibilities
- Work with Prof. Selvitella on a specific research project centered on the development of new data science, machine learning, and mathematical methods for the study of one among: (1) infectious diseases (e.g. COVID-19), (2) neuroimaging (e.g. fMRI), and (3) organismal biology (e.g. ecomorphology of primate bones).
- Perform statistical analysis of datasets of interest to the project using statistical software such as R, Python, and Matlab.
- Prepare manuscripts/research reports on the project and identify possible venues for submission, such as journals or conferences with focus on data science, machine learning, statistics, applied mathematics, infectious diseases, neuroimaging, and organismal biology.
- Report to Prof. Selvitella on progress/activities 2 times/week (30min-1hr meetings).

Interested candidates should submit their CV/resume and a letter of interest to Prof. Alessandro Maria Selvitella, Department of Mathematical Sciences, Purdue University Fort Wayne at aselvite@pfw.edu. The letter of interest should describe your background, why you are interested in these topics, and how the positions advertised in this notice are in line with your long-term career goals. Applicants must be eligible to work in the US and must be able to show that proof within 3 days of hire. Working remotely is negotiable. Applications will be accepted until the positions are filled. Full consideration will be given to those applications submitted not later than 15th February 2022.