CSDA Lab Research Guidelines & Agreement

Welcome to the Computational Mathematics, Statistical Modeling, and Data Analytics (CSDA) Lab! I hope this will be a fun and rewarding experience for all of us. This document provides guidelines and agreements for students participating in laboratory research related to Mathematics, Statistics, and Data Analysis. By participating in the lab activities, you agree to adhere to these guidelines.

Purpose:

The lab's primary purpose is to foster a conducive environment for learning, exploration, and hands-on experience with various mathematical and statistical models, techniques, and tools used for data analysis.

General Guidelines:

- **Safety First:** Although we work mainly with data and software, ensure that all electrical equipment is handled safely.
- Attendance: Regular attendance during lab meetings is crucial. Inform the Dr. Pu in advance if you cannot attend.
- **Collaboration:** Collaboration is encouraged, but ensure you understand and can replicate the results independently. Always credit collaborators in your reports and presentations.
- **Backup Your Work:** Always have a backup of your data and findings. Utilize cloud storage or external drives.
- **Take Notes:** Make sure to store your meeting notes on the cloud and document your research progress in Overleaf. Once done, please share the folder with me.

Data Handling and Management:

- **Data Confidentiality:** Any data provided by the lab or external sources must be treated with confidentiality. Do not share or distribute data without proper authorization.
- **Citation:** Always credit the source of the data you're working on. Ensure that any public domain datasets are properly referenced.
- **Data Integrity:** Do not manipulate or alter data in a way that would misrepresent the information.

Research Ethics:

- Academic Honesty: Plagiarism will not be tolerated. Ensure that all work submitted is original, and any external sources are properly cited.
- **Objective Reporting:** Report your findings objectively, without bias. Do not exaggerate or minimize results to fit a particular narrative.
- **Peer Review:** Respect feedback from peers and instructors. Constructive criticism is crucial for growth.

Project Submission:

- **Deadlines:** Adhere to project submission deadlines. Extensions may be granted on a case-by-case basis.
- **Documentation:** All projects should be accompanied by clear documentation, which includes objectives, methodologies, data sources, findings, and conclusions.
- **Presentation:** Students may be required to present their findings. Ensure your presentation is clear, concise, and well-organized.

Authorship:

I aspire for every student working in the lab to be part of a scientific publication and/or presentation. The lab's co-authorship policy necessitates a substantial contribution to at least 2 (and frequently 3) of the project stages outlined below:

1) Initiated the project with an original idea (e.g., crafted a proposal, secured funding).

2) Undertook major tasks, ran simulations, and managed data.

3) Analyzed data and inferred findings to a degree that enables manuscript drafting.

4) Brought a manuscript, poster, or talk to its final, publishable state (e.g., drafting, editing, creating visuals).

To be considered for the first author, a significant contribution to a minimum of 3 stages mentioned above is required, especially emphasizing stage (4). If you aspire to be the first author, please engage in a dialogue with me from the project's inception. Do note that authorship roles might be revised for incomplete projects. Minor or sectional contributions to a project may earn you a mention in the Acknowledgements section.

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Expectations & Management Time:

Undergraduate Students:

- 9 hours a week in research
- At least 3 days/ week to make adequate progress forward
- Minimum of 2-3 hour blocks between the hours of 9am and 5pm

Graduate Students:

- 15 hours a week in research, not including class or teaching assistant time
- 4-5 days a week to make adequate progress forward
- Minimum of 3-5 hour blocks between the hours of 9am and 5pm

Thoughts on cancelation: things come up, schedules change, however, please be courteous of other's time and try your best to maintain scheduled meetings or give adequate notice if you need to reschedule.

Meetings:

• Group Meetings:

We will meet as a group weekly to share results, updates, thoughts, and pertinent literature. Additionally, we'll engage in activities geared towards professional growth and team cohesion. For each meeting:

- Bring at least one item (like results, data, or visuals) for discussion.
- Prepare a minimum of one question.
- Reflect on the previous week's outcomes and plan for the week ahead, considering any required adjustments.

In response, I promise to actively participate, provide feedback, and suggest potential new paths.

• One-on-One Sessions:

Every lab member is expected to schedule a regular meeting with Dr. Pu on a weekly basis. While we will establish a routine meeting time, additional sessions can always be arranged as needed. Dr. Pu is available on campus from Monday to Thursday, and often on Fridays as well.

10 things that take zero talent, but will get you far:

- 1. Being on time
- 2. Strong work ethic
- 3. Effort
- 4. Body language
- 5. Energy
- 6. Positive attitude
- 7. Passion
- 8. Being coachable
- 9. Doing extra
- 10. Being prepared

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Important Communication Reminder

Please ensure you respond to Dr. Pu's emails within a 36-hour window during workdays. It's understandable if results are not always ready by the desired time. However, consistent accountability is crucial. Failing to respond within the specified time frame on more than three occasions will be noted in any recommendation letters written on your behalf. This could significantly impact your future job or graduate school applications.

Questions: If you have any questions about these or other topics, please do not hesitate to ask! It is my job to explain it to you, so please ask!

Agreement:

By signing below, you acknowledge that you have read, understood, and agree to abide by the guidelines and stipulations mentioned in this document.

Student's Name (Printed) Date

Student's Signature

We hope these guidelines will provide a foundation for a productive and respectful learning environment. Best of luck in your research endeavors!