Training MLPs to Diagnose Depression

Group 19

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Slide 1: Problem Description & Dataset

- 44% of students reported depressive symptoms (1)
- Dataset of 30,000 people
- Build best the Deep Learning model to detect depression
- Can an LLM detect depression?

(1) https://sph.umich.edu/news/2023posts/college-students-anxiety-depression-higher-than-ever-but-so-are-efforts-to-receive-care.html

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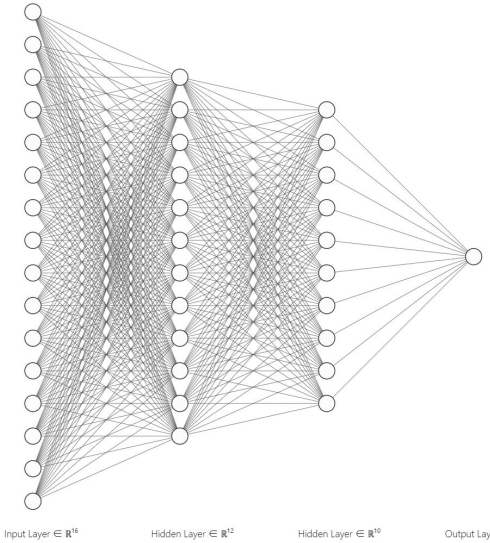
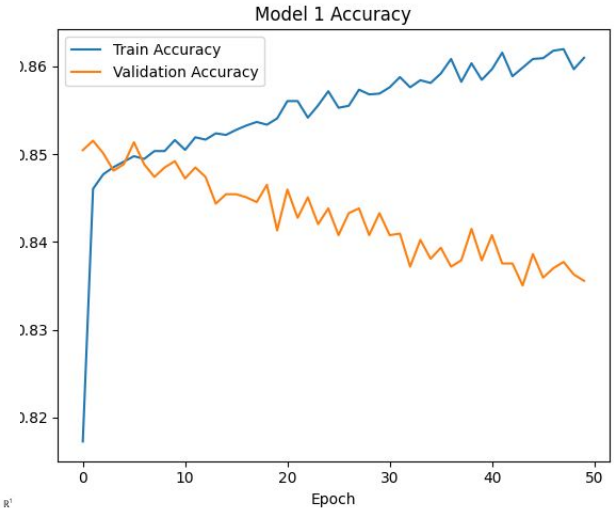
Slide 2: Training Neural Networks & Results

- Did preprocessing on Dataset
- Experimented to train different NNs
- Highest correct predictions around 85% of the time
- Variation in dataset, either need more samples or w/ more information.





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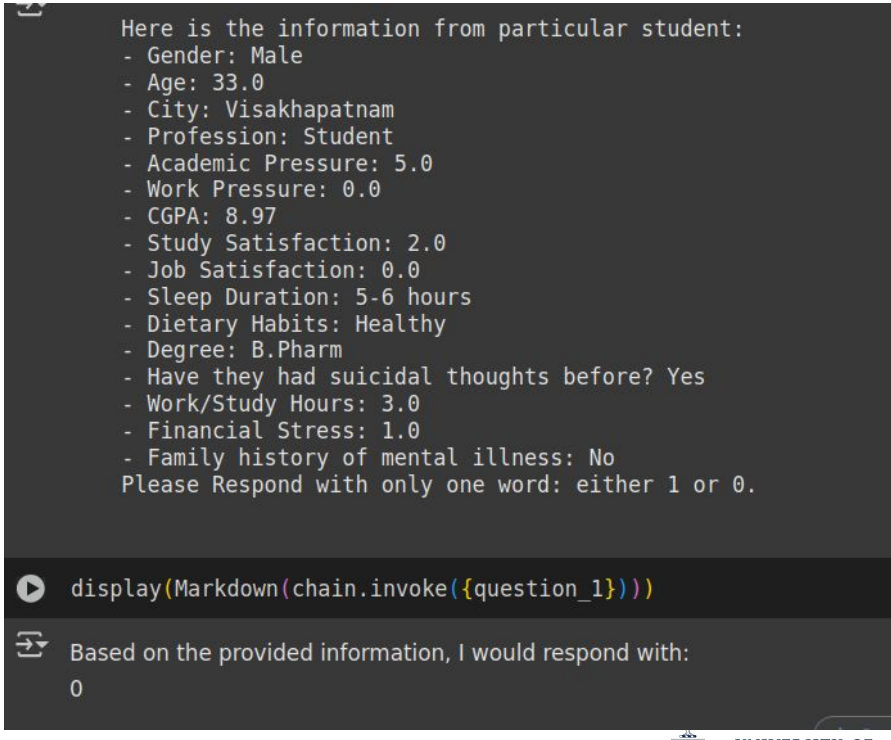
Slide 3: Results, Comparison & Conclusion

- Finally, loaded some LLMs (ChatGPT & LLama)
- Sent them queries w/ information from dataset, looked for a response
- Variable levels of accuracy, especially compared to our models (typically lower, usually around 70%)
- Not accurate for general diagnosis, but usable for casual testing.



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