**CSE523: Machine Learning**

**Project Progress Report**

**Breast Cancer Detection**

**Group: The Curators**

| **Name** | **Roll number** |
| --- | --- |
| **Harsh Patel** | **AU1940114** |
| **Kavan Desai** | **AU1940126** |
| **Sarthak Bharad** | **AU1940176** |
| **Jinil Chandarana** | **AU1940121** |

1. **Tasks Performed in the week.**

* We read and understood several research papers available on the internet that are in line with our topic of the project.
* We discovered and learnt about some new biological terms such as Malignant and Benign.
* We found some datasets that may be suitable for our project development.

1. **Outcomes of the tasks performed.**

Malignant: Malignant tumours are cancerous (i.e, they invade other sites). They spread to distant sites via the bloodstream or the lymphatic system.

Benign: Benign tumours stay in their primary location without invading other sites of the body. They do not spread to local structures or to distant parts of the body. Benign tumours tend to grow slowly and have distinct borders.

Research papers: -

* 1. Y. Khourdifi and M. Bahaj, "Applying Best Machine Learning Algorithms for Breast Cancer Prediction and Classification," 2018 International Conference on Electronics, Control, Optimization and Computer Science (ICECOCS), 2018, pp. 1-5, doi: 10.1109/ICECOCS.2018.8610632.
  2. Yedjou, C. G., Tchounwou, S. S., Aló, R. A., Elhag, R., Mochona, B., & Latinwo, L. (2021). Application of Machine Learning Algorithms in Breast Cancer Diagnosis and Classification. *International journal of science academic research*, *2*(1), 3081–3086.
  3. Naji, M. A., Filali, S. E., Aarika, K., Benlahmar, E. L. H., Abdelouhahid, R. A., &amp; Debauche, O. (2021, September 8). Machine learning algorithms for breast cancer prediction and diagnosis. Procedia Computer Science. Retrieved February 8, 2022, from <https://www.sciencedirect.com/science/article/pii/S1877050921014629>
  4. N. Fatima, L. Liu, S. Hong and H. Ahmed, "Prediction of Breast Cancer, Comparative Review of Machine Learning Techniques, and Their Analysis," in IEEE Access, vol. 8, pp. 150360-150376, 2020, doi: 10.1109/ACCESS.2020.3016715.

Dataset: - <http://archive.ics.uci.edu/ml/datasets/breast+cancer+wisconsin+%28diagnostic%29>

1. **Tasks to be performed in the upcoming week.**

* We will undergo data analysis and initialize coding part.