Medical Segmentation System for Brain Tumor

MLOps Project 2

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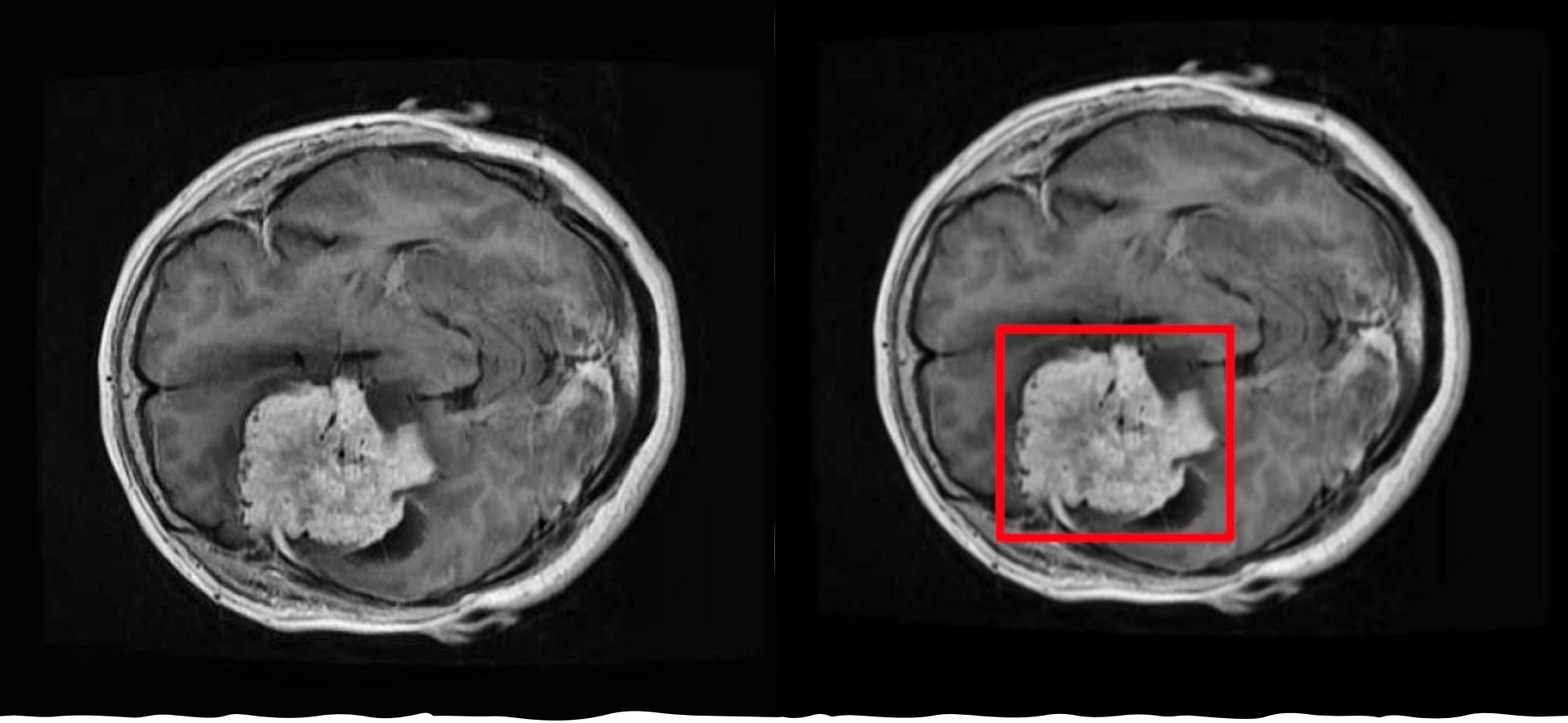
Introduction

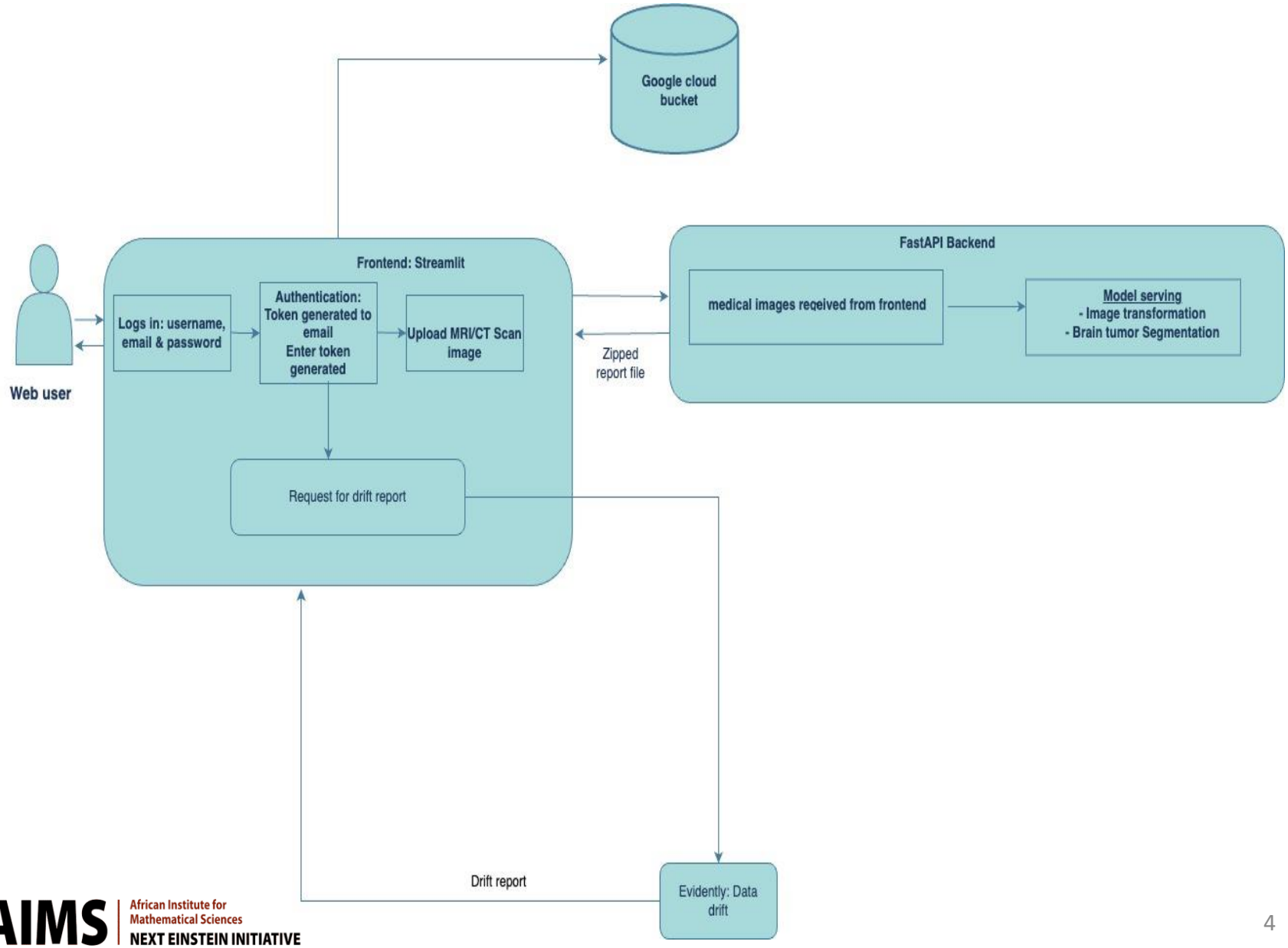
- Brain tumors are abnormal growths of cells in the brain or nearby areas, varying widely in size.
- Treatment options depend on the tumor type (cancerous or non-cancerous), size, and location.
- **Goal:** To develop a convolutional neural network (CNN) model from scratch that accurately segments tumor regions in brain images.
- **Pains:** Medical practitioners often face difficulties in identifying tumor regions and assessing tumor size within brain images.



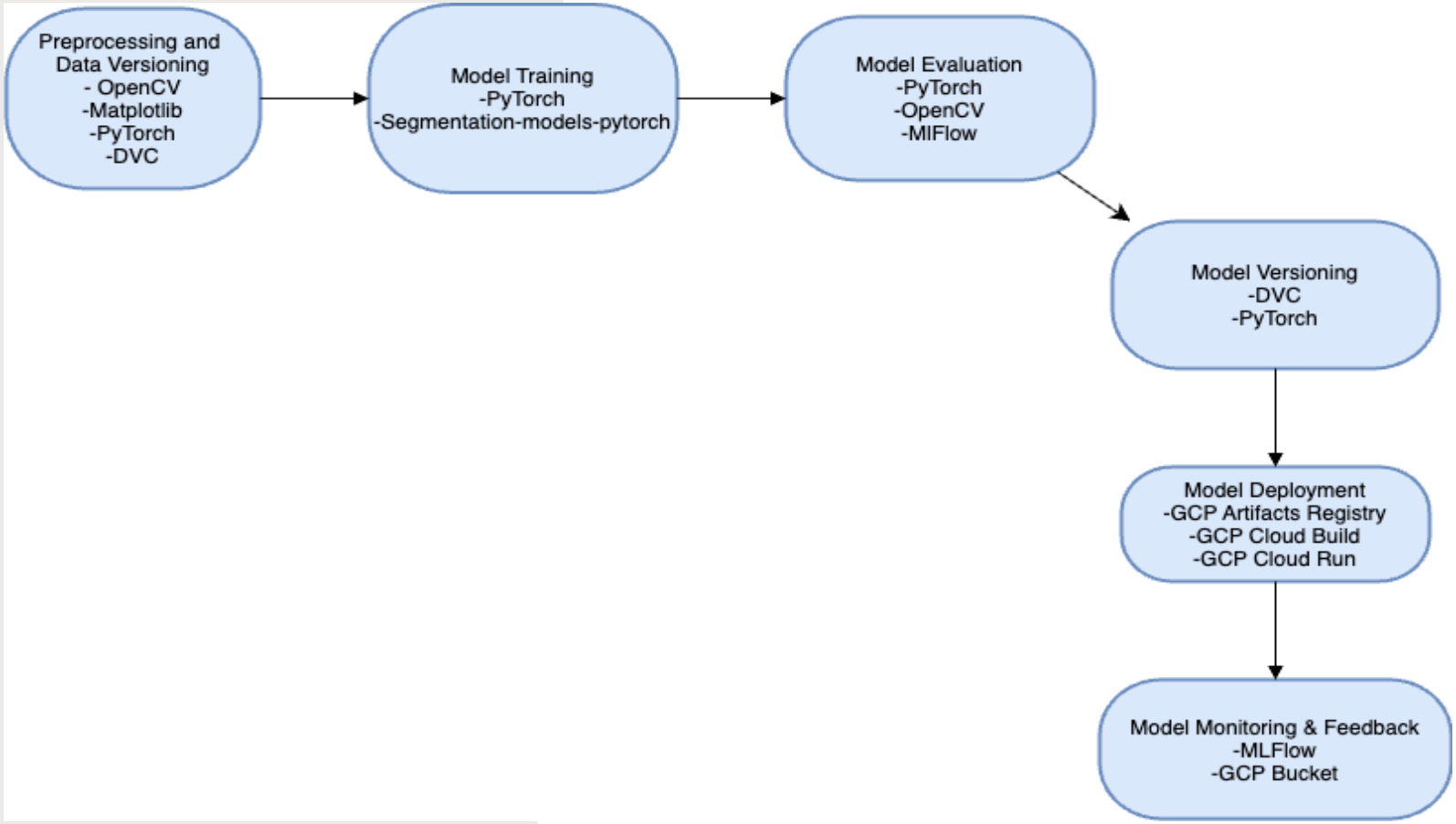
Value Proposition

- **Offer:** A machine learning model that accurately segments tumor-affected areas of the brain, highlighting both the size and location of the tumor.
- **Benefits:** By clearly identifying the affected regions and tumor size, medical professionals can make informed decisions regarding treatment options more quickly and efficiently.

Architectural Diagram

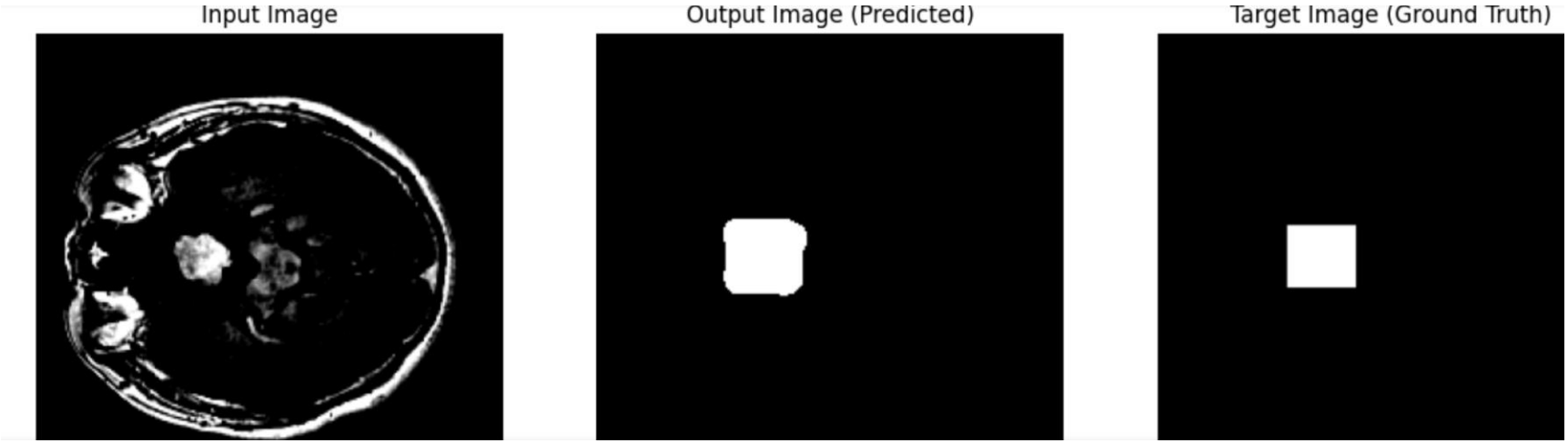


Workflow (Flow Diagram)



Model Result

- The predicted output is resembles the ground truth.



Thank you