



# LIPS-MOVEMENT DETECTION MODEL & APP

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**IN THIS JUNIOR PROJECT REPORT, WE PRESENT THE DESIGN AND IMPLEMENTATION OF THE LIPS-MOVEMENT-DETECTION MODEL APP, AN INNOVATIVE APPLICATION THAT DETECTS AND ANALYZES LIP MOVEMENTS USING COMPUTER VISION TECHNIQUES.**

The need for an efficient and exact system that can detect and interpret lip movements is the problem we hope to address with the development of the LIPS-MOVEMENT-DETECTION model app. This project aims to bridge the gap between speech recognition and visual cues by detecting and analyzing lip movements for various applications using computer vision techniques





**THE GOALS OF THIS PROJECT ARE TO: DEVELOP A LIPS-MOVEMENT-DETECTION-MODEL-APP THAT CAN DETECT AND TRACK LIP MOVEMENT IN REAL TIME. TRAIN A DEEP LEARNING MODEL FOR LIP MOVEMENT DETECTION. EVALUATE THE PERFORMANCE OF THE APP ON A VARIETY OF DATASETS.**

**Define the problem, Choose deep learning Framework**

**Collect data, Process data**

**Build data loading function**

**Create data pipeline**

**Setup Training Options & Train the model**

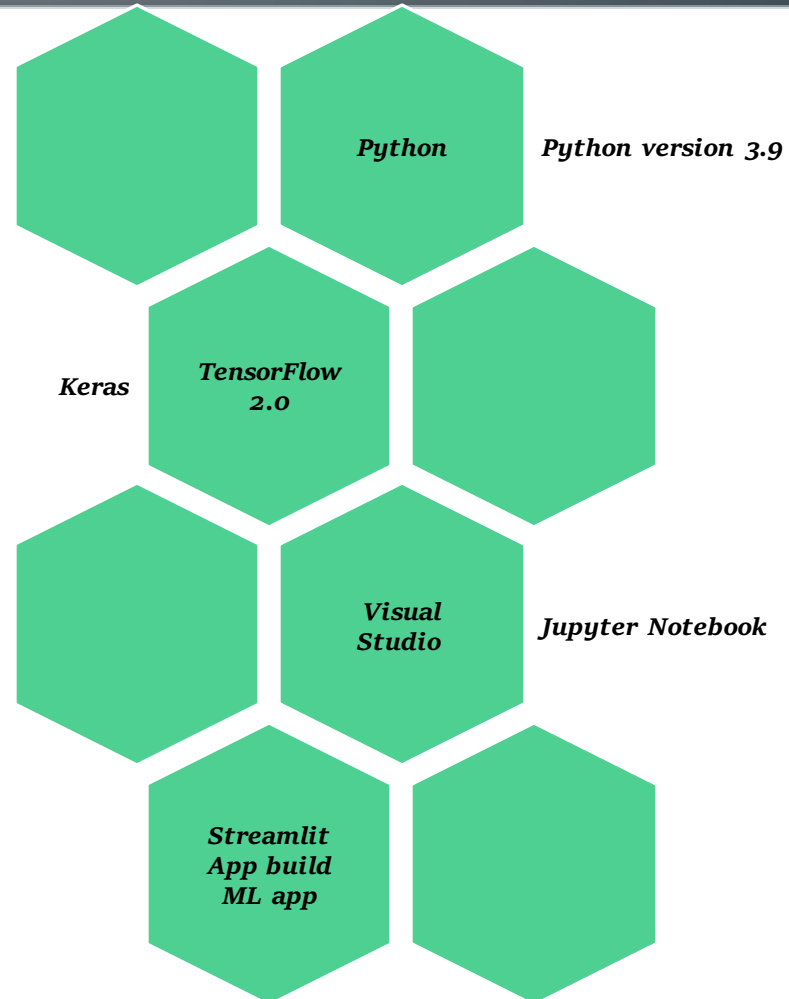
**Evaluate the model**

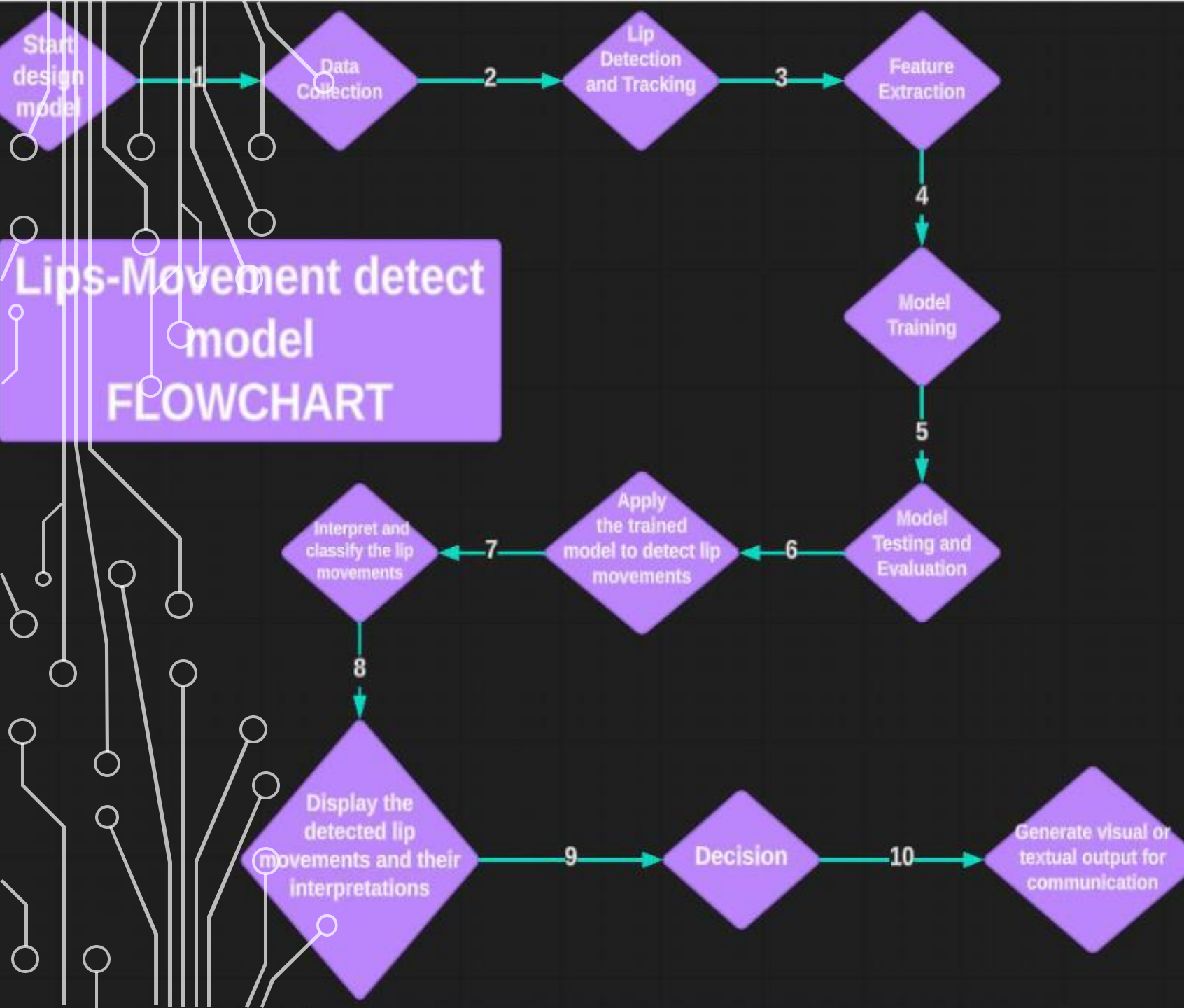
**Test the model**

**Build Streamlit ML App**

# TECHNOLOGY WE USED IN OUR PROJECT

CONVOLUTIONAL NEURAL  
NETWORKS (CNNs) WERE  
USED TO EXTRACT  
RELEVANT VISUAL  
FEATURES FROM THE LIP  
REGION.





# PROJECT FLOWCHART



# LET'S EXPLAIN OUR MODEL NOW

[HTTPS://GITHUB.COM/TAS890/LIPS-MOVEMENT-DETECTION-MODEL-APP](https://github.com/TAS890/LIPS-MOVEMENT-DETECTION-MODEL-APP)