



BodyM Dataset Details

- **Contents:**
 - 8,978 black-and-white silhouette images (frontal and lateral views) of 2,505 real subjects.
 - Detailed biometric data including height, weight, gender, and 14 precise body measurements such as ankle girth, arm length, bicep girth, calf girth, chest girth, forearm girth, hip girth, leg length, leg girth, shoulder breadth, thigh girth, waist girth, wrist girth, and shoulder-to-crotch length.
- **Data Splits:** Training set and two test sets with diverse environmental conditions to test robustness.
- **License:** Creative Commons Attribution-Non Commercial 4.0 International.
- **Access:** Publicly available on AWS S3 without credentials using AWS CLI.
- **Use Case:** Designed for body shape modeling, biometric research, and automated metric extraction from silhouette images.

Why BodyM is Used for Your Project

- **Image-Based Metric Extraction:** Your project involves users uploading photos to automatically compute body metrics. BodyM contains silhouette images paired with extensive ground-truth biometric data, enabling training of computer vision models that estimate body measurements directly from images.
- **Supports Body Type Classification:** While it lacks explicit somatotype labels, the comprehensive biometric measurements can be used to derive or classify body types (endomorph, mesomorph, ectomorph) through data-driven methods or rules, supporting your if-else workout recommendation logic.
- **Simplifies User Input:** The dataset aligns with your updated project goal of only requiring a user image as input, as models trained on BodyM can extract key body features without manual biometric entry.
- **Accessibility and Practicality:** Public availability with a clear license and no access restrictions facilitates swift development and deployment of your AI system.
- **Robustness:** Multiple viewing angles and varying test conditions in BodyM ensure model generalization to real-world images uploaded by users in diverse environments.

Summary

| Aspect | Explanation |
|--------------------------|---|
| Images | Frontal and lateral silhouette images for metric learning |
| Biometric Data | Extensive body measurements to supervise learning |
| User Input Alignment | Supports image-only input pipeline |
| Body Type Classification | Enables derivation of body types from numeric metrics |
| Accessibility | Open dataset, easy to download and use |
| Practical for AI Model | Enables automatic metric extraction from simple images |

BodyM provides the ideal balance of image data and biometric ground truth needed to build automated, image-only body type classifiers that power personalized workout recommendations in your project. ^[1] ^[2]



1. <https://registry.opendata.aws/bodym/>
2. <https://www.kaggle.com/datasets/tapakah68/body-measurements-dataset>