

ABSTRAK

APLIKASI *AUGMENTED REALITY* BERBASIS *BODY TRACKING* SEBAGAI MEDIA PEMBELAJARAN PENGENALAN PROFESI PADA ANAK USIA DINI DI TK AISYIYAH 11 PALEMBANG

(Rakha Pratama Putra 2026: 90 Halaman)

Pengenalan profesi pada anak usia dini memerlukan media pembelajaran yang interaktif agar dapat meningkatkan keterlibatan peserta didik dalam proses belajar. Penelitian ini bertujuan merancang dan membangun aplikasi *Augmented Reality* berbasis *body tracking* sebagai media pembelajaran pengenalan profesi pada anak usia dini di TK Aisyiyah 11 Palembang menggunakan metode *Multimedia Development Life Cycle* (MDLC) yang meliputi tahap *concept*, *design*, *material collecting*, *assembly*, *testing*, dan *distribution*. Aplikasi dikembangkan menggunakan *Unity* dengan implementasi *MediaPipe Pose* dan diuji menggunakan *Black Box Testing*, validasi ahli dengan metode *Aiken's V*, serta pengujian implementasi *body tracking* berdasarkan variasi jarak, gerakan tubuh, dan intensitas cahaya. Hasil penelitian menunjukkan bahwa seluruh fitur aplikasi berhasil berfungsi sesuai dengan 19 skenario *Black Box Testing*, memperoleh tingkat validitas sebesar 92,7% dari ahli materi dan 86,5% dari ahli media dengan kategori sangat valid, serta mampu mengikuti gerakan tubuh pengguna secara *real-time* dengan performa optimal pada jarak 75 cm dan 150 cm serta kondisi pencahayaan yang memadai. Berdasarkan hasil tersebut, aplikasi *Augmented Reality* berbasis *body tracking* dinyatakan layak digunakan sebagai media pembelajaran pengenalan profesi pada anak usia dini.

Kata Kunci: *Augmented Reality*, *body tracking*, *MediaPipe Pose*, media pembelajaran, *Black Box Testing*, *Aiken's V*, pengenalan profesi.

ABSTRACT

Augmented Reality Application Based on Pose Detection as a Learning Medium for Introducing Professions to Early Childhood Learners at TK Aisyiyah 11 Palembang

(Rakha Pratama Putra 2026: 90 Pages)

Introducing professions to early childhood learners requires interactive learning media that can increase student engagement during the learning process. This study aimed to design and develop an Augmented Reality application based on body tracking as a learning medium for introducing professions to early childhood students at TK Aisyiyah 11 Palembang. The study employed the Multimedia Development Life Cycle (MDLC) method, which consists of six stages: concept, design, material collecting, assembly, testing, and distribution. The application was developed using Unity with the implementation of MediaPipe Pose to support the body tracking feature. The application was evaluated through Black Box Testing, expert validation using Aiken's V, and body tracking implementation testing based on variations in user distance, body movement, and lighting intensity. The results showed that all application features functioned properly across 19 Black Box Testing scenarios. The application achieved validity scores of 92.7% from material experts and 86.5% from media experts, both categorized as highly valid. In addition, the body tracking feature successfully detected users' body movements in real time, with optimal performance at distances of 75 cm and 150 cm under adequate lighting conditions. Based on these findings, the developed Augmented Reality application based on body tracking is considered feasible as a learning medium for introducing professions to early childhood learners.

Keyword: *Augmented Reality, body tracking, MediaPipe Pose, learning media, Black Box Testing, Aiken's V, profession introduction.*