

## ABSTRACT

---

Presence process at SMA Negeri 8 Bandung still using manual way with presensi paper, to support better academic process SMA Negeri 8 Bandung need a system that can simplify the process of presenting and presenting data information in SMA Negeri 8 Bandung. The authors propose attendance and searching application via CCTV to overcome the problem of presensi which is still manual and information requirement of presenting information faster in SMA Negeri 8 Bandung and this application can assist parent role to supervise child which is in class. The method used to manufacture the application is the waterfall method. Stages waterfall workmanship is doing interviews to school residents, build or repair the mockup for a picture of the built application. This application is made using java programming language by using biometric method (facial recognition system) that is eigenface motif which is available in open CV platform which has been wrapped with java into javacv, MySql for database storage, tool editor using Netbeans 8.01 and CCTV as shooting media. With the use of technology and various methods used, this application must be able to make the process of presenting and searching students in SMA Negeri 8 Bandung with CCTV media and facilitate to obtain attendance data information and assist the process of supervision of parents against students in the class.

Keywords: Face recognition, Eigenface, Java, OpenCV, SMA Negeri 8 Bandung, Presence, CCTV, Waterfall.