# FaceGuard Cron Jobs

Cron jobs will be used t0 process some of our data and to regularly check and update them. FaceGuard is a 24/7 active system and we will use cron jobs to keep the system running without problems. There will be a few cron jobs used including: facial recognition database update, event logging and visitor history archiving.

1. Facial recognition database update cron job:
   * Task: This cron job will be used to regularly update the facial recognition database with new visitors, update visitors and remove visitors from the database.
   * Job: We will schedule a script to run daily for this task. A script at 4 am every day will be run to scan the folder with images for new faces and update the database accordingly. The script will compare images with the database to make sure that existing images are not added twice.
   * Cron: 0 4 \* \* \* /usr/FaceGuard/updateDatabase.sh
2. Event logging cron job:
   * Task: This cron job is used to log events such as the motion detections, bell presses and when a visitor arrives.
   * Job: This job will be scheduled to run every hour to ensure that the logs are kept regularly. This script will run MySQL commands to regularly add to the logs database with the essential information including visitors, detections and bell presses.
   * Cron: 0 \* \* \* \* /usr/FaceGuard/eventLogging.sh
3. Visitor history archiving cron job:
   * Task: With this cron job, we will archive the history of recognized visitors so that the data can be safely stored.
   * Job: This will run a script daily at midnight that archives the history of recognized visitors that day. It will be run at midnight to not disrupt usage. Backups will be stored in AWS servers for security and privacy purposes.
   * Cron: 0 0 \* \* \* /usr/FaceGuard/backup.sh

References

<https://kubernetes.io/docs/concepts/workloads/controllers/cron-jobs/#:~:text=CronJob%20is%20meant%20for%20performing,CronJobs%20have%20limitations%20and%20idiosyncrasies>.

https://www.hostinger.com/tutorials/cron-job