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»PocketNet: Extreme Lightweight Face Recognition Network Using Neural Architecture Search and Multistep Knowledge Distillation«

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Contemporary facial recognition algorithms necessitate substantial computational capacity, surpassing what is typically available in mobile and embedded systems.

The feasibility of implementing a highly efficient yet precise facial recognition system on resource-constrained embedded and low-end devices warrants investigation.
The paper pioneers the use of Neural Architecture Search (NAS) for creating a compact face recognition model. It introduces an innovative multi-step knowledge distillation (KD) training approach. PocketNets attains state-of-the-art performance while notably reducing network parameters.

**USP**

- Introduces PocketNets, a new family of extremely lightweight yet accurate face recognition (FR) models.
- PocketNets offer a highly efficient alternative for face recognition tasks, particularly suitable for deployment on embedded and low-end devices.