

# EKREM BULGAN

REAL-TIME SYSTEMS & AI APPLICATIONS

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## ABOUT

Software engineer specialized in real-time systems and AI-driven applications. Experienced in Flutter, Firebase and scalable backend architecture. Focused on building production-ready, performance-oriented solutions.

## CONTACT

### PHONE

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### GITHUB

github.com/idginity124

### PORTFOLIO

idginity124.github.io

### LOCATION

Turkey

## LANGUAGES

### Turkish

Native

### English

Upper-Intermediate (B2)

## EDUCATION

### Firat University

Digital Forensic Engineering  
2021 - 2026

## PROFESSIONAL EXPERIENCE

### Intern Software Engineer

#### HermonyERP - Sakarya | 2024 - 2025

- Contributed to ERP module development and system optimization
- Developed backend logic for data processing workflows
- Improved internal reporting performance by optimizing query handling

## SKILLS

**Programming:** Python · Dart · C# · JavaScript

**Mobile:** Flutter · Firebase · Riverpod · Android Studio

**Backend:** REST APIs · SQL / NoSQL · Firebase Hosting

**AI & ML:** Applied Machine Learning · Data Processing · RVC / Voice Cloning

**DevTools:** Git · GitHub · VS Code · Android Studio

**UI/UX:** Mobile-first design · Component-based UI · Dark/Light theming

## PROJECTS

### Zleno - Real-Time Voice Platform

Flutter · Firebase · Agora RTC · Riverpod

Mobile app with real-time voice rooms and role-based architecture (host/participant). Firebase Auth, scalable Firestore subcollection design, Agora RTC for low-latency audio, custom security rules, and ban/admin control.

### VidExtract - Desktop Media Downloader

Python · PySide6 · yt-dlp · FFmpeg

Windows desktop app for platform-agnostic media downloading. Integrates yt-dlp for multi-platform support and FFmpeg pipeline for format conversion (MP4, MP3). Includes automatic metadata extraction and dark/light theme UI.

### LingoPark - Gamified Language Platform

Web · UX Design · Product Architecture

Web app for vocabulary learning with gamification mechanics. Level-based word categories (A1-C1), timed challenge mode, offline-first content flow, and structured progression system.

### Bird Detection (TÜBİTAK) - YOLOv8 Model

Python · YOLOv8 · OpenCV · Computer Vision

Object detection model for bird species identification. Custom dataset labeling, augmentation, YOLOv8 training, bounding box detection, and performance evaluation (precision / recall / mAP).

### CipherVault - Offline Password Manager

Flutter · Python · AES Encryption · QR Transfer

Cross-platform (Windows + Android) offline password manager with AES encryption, master password model, category/search, and QR-based device-to-device import. Published & released.

## CAREER FOCUS

Goal: AI-powered cross-platform apps running natively on mobile (Android/iOS) and desktop (Windows) — bridging machine learning with great end-user products.

**Current:** Integrating on-device AI into Flutter apps with Windows parity via shared codebase.

**Vision:** Shipping AI-native cross-platform products where real-time intelligence and great UX coexist on every device.