

EdgeFindr: Smart Offline File Finder

Presented by Team EdgeFindr for the Qualcomm Edge AI Track at Raise Your Hack 2025.

The Frustration of File Chaos



Scattered Files

Important documents, code snippets, and tickets are often dispersed across numerous folders and file formats, creating digital clutter.



Wasted Time

Manual searching is incredibly slow, frustrating, and prone to human error, leading to significant time wastage for users.



Lost Productivity

Users constantly struggle to locate crucial files like travel tickets, API keys, or project documents, hindering productivity.

EdgeFindr: Your Intelligent File Assistant

EdgeFindr revolutionises file retrieval by allowing you to simply **ask in plain English**:

"Find my API keys"

"Show my travel tickets from last year"

"Locate the Python script for data processing"

Our solution **scans text files, PDFs, and code offline**, returning exact matching files instantly. It leverages Groq Cloud only if available for enhanced capabilities; otherwise, it remains fully offline, ensuring privacy.



Under the Hood: Technical Architecture

Ingestion Module

Processes files one by one, extracting raw text from various formats including PDFs and code files for analysis.

Embedding Layer

Utilises a lightweight LLaMA model (ONNX/TinyLLaMA) to convert text into numerical embeddings, optimising for edge devices.

FAISS Indexing

Stores these generated embeddings efficiently in a FAISS (Facebook AI Similarity Search) database for rapid similarity searches.

Query & Retrieval

An LLM receives the user's natural language query, searches the FAISS database, and returns precise file paths.

Qualcomm Optimisation

The model is meticulously compiled with Qualcomm Neural Processing SDK (QNN) and DLC for seamless execution on the Snapdragon X Elite NPU.

Why EdgeFindr Matters: Impact & Innovation

100%

Offline & Private

No cloud dependency unless Groq is explicitly used, ensuring maximum data privacy and security for sensitive files.

<100

Milliseconds Fast

Delivers precise search results in milliseconds, drastically cutting down the time spent on manual file hunting.

Edge

AI Ready

Purpose-built for the Snapdragon X Elite NPU, showcasing true edge AI capabilities and performance.

High

User Value

Provides tangible value by eliminating manual file searches, enhancing productivity, and reducing user frustration significantly.