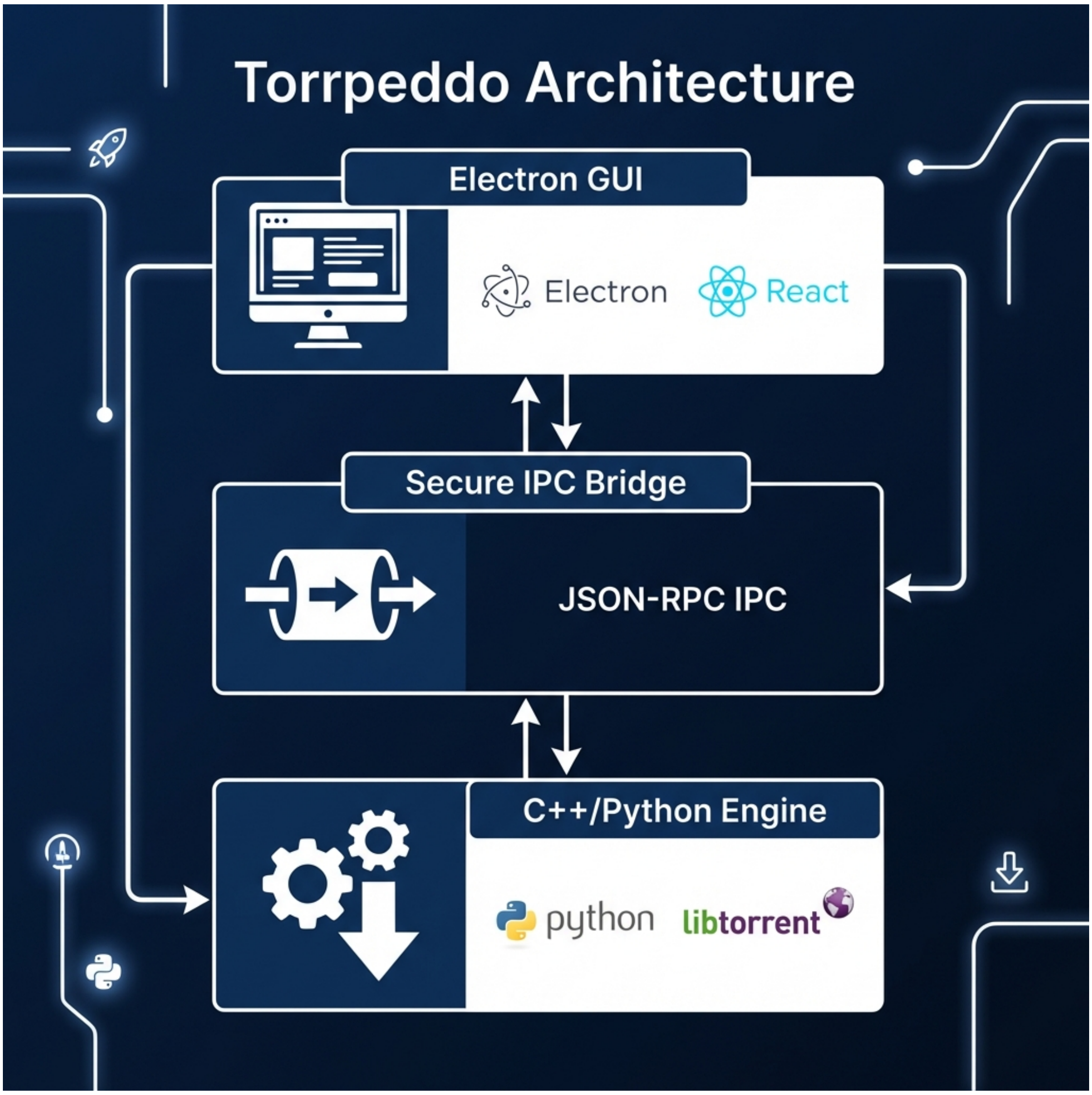
TORRPEDDO PROJECT BOOK



Executive Summary

Torrpeddo is an industrial-grade, premium torrent client designed for the modern desktop. Built primarily with Python and the Electron framework, Torrpeddo leverages the powerful `libtorrent` suite to offer a seamless, high-performance experience that bridges the gap between complex network protocols and professional user interfaces.

Architectural Deep Dive

Torrpeddo follows a decoupled architectural pattern, separating the presentation layer from the core logic and network engine. This is achieved through three primary layers:

1. Frontend: Electron Framework

What is Electron?

Electron is an op
build cross-platfo
JavaScript. It con
runtime (for syste

Benefits for Torrpeddo:

- Visual Excell

components to c

2. The Bridge: IPC (Inter-Process Communication)

What is IPC?

IPC, or Inter-Proc
to share data and
connect the Elec

Implementation: Secure JSON-RPC

Communication i

Why this approach?

- Decoupling:

touching the UI.

3. Backend Engine: Python & libtorrent

The Core: libtorrent with Python Bindings

At the heart of To
While the underly
utilizes the officia
with the bridge lo

Multi-threaded Performance:

- Engine Level
I/O, network polli
multiple torrent fr

Development Process & Methodology

The Torrpeddo project followed a "Platform-First" methodology:

1. Language C
of integration wit
