

# Cornelius Renken

## Contact

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## Profiles

LinkedIn: [linkedin.com/in/corneliusrenken](https://www.linkedin.com/in/corneliusrenken)

GitHub: [github.com/corneliusrenken](https://github.com/corneliusrenken)

Technical Skills	Front End	Back End	Infrastructure	Tools	Languages
	React	Node.js	Docker	Git	JavaScript
	Svelte	Express	AWS	Vim	TypeScript
	Sass	PostgreSQL	Electron	Webpack	C#
	Redux	MongoDB	Jest	Babel	
	HTML/CSS	Pinecone	Puppeteer	ChatGPT	

## Projects

**Twice** — Electron, React, Sass, Sqlite [Live Demo](#) — [GitHub](#) — 2023  
Habit tracker with a focus on UI and UX

- Reworked default browser behaviors to craft a bespoke, native user experience
- Designed and implemented intricate animations and layouts for a satisfying and engaging experience
- Built a task queue to ensure both instant client-side interactions as well as accurate, sequential backend processing
- Improved code maintainability by dynamically generating Typescript interfaces for Electron-exposed native APIs

**Notion Query** — OpenAI, Pinecone, Svelte [GIF](#) — [GitHub](#) — 2023  
Answer queries using a Notion workspace as context

- Implemented a Pinecone vector database for rapid contextual data retrieval
- Optimized vectors by building parsers to unfold Notion's block structure, paginating pages as needed to abide by the OpenAI API token limitations
- Improved responses by augmenting the user query using GPT-4 and thus improving the quality of contextually chosen pages
- Employed server-sent events to provide real-time status updates while querying

**Soulful** — Express, AWS, PostgreSQL [GitHub](#) — 2022  
E-commerce back end rebuilt to handle web-scale traffic

- Replaced a monolithic API with a scalable service-oriented architecture
- Optimized SQL queries to achieve sub-1ms response times on tables of 3M+ rows
- Identified bottlenecks by stress testing using K6, Loader.io, and New Relic
- Deployed service on AWS and scaled it to handle 300% more throughput via load balancing and caching

## Experience

**Music Producer / Audio Engineer** 2017 - 2021  
Self-Employed

- Attained over 10 million plays across solo and contracted work
- Worked in high-pressure environments with artists in-studio and remotely
- Realized artist's ideas given anything ranging from minimal direction to exact specifications

## Education

**Hack Reactor** 2022  
Advanced Software Engineering Certificate

## Awards

**Agora Video SDK Hackathon – 2<sup>nd</sup> Place** 2022  
Video chat application for anonymous discussions on shared interests