Cornelius Renken

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Profiles
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Technical Skills

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

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   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 – 2ⁿᵈ Place   2022