# Rafael Khan

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# Skills

- **10 years** of delivering large-scale, reliable **Javascript** and **Typescript** applications. Deep proficiency with **NodeJS**, **React**, and the associated ecosystem + tools.
- Multitude of databases, like Postgres, MySQL, DynamoDB, MongoDB, Azure Tables and Redis.
- Comfortable with many programming languages, like **C/C++**, **Java**, **Go**, **Python**, **PHP**, and more. I am always happy to learn new languages and technologies.
- System design for large and/or distributed applications.
- AWS, Azure cloud development
- Team **leadership**, **coaching**, **and training**. From assisting junior developers, to facilitating workshops, to agile process leadership.
- Experience with creating physical electronics projects, including one that is currently being sold and is used every day by many musicians

# **Experience**

2021 - PRESENT

#### Okay Synthesizer - Founder

- My boutique, **open source**, **music hardware manufacturing company**. Specializing in digital synthesizers and other electronic music equipment
- Manufactured high quality PCB/circuit designs made in KiCad
- Wrote high performance, low-level firmware in C++ capable of being ported to other CPU architectures / application runtimes
- Coached junior developer to **build software recreations** of our hardware, for use as a plugin in popular music production software suites

NOV 2023 - AUG 2023

# THE LNK - Senior Software Developer

- Developed suite of backend integrations between our internal order/inventory system, with external big box **retail EDI** systems
- Worked with essential stakeholders (manufacturers, shipping logistics, retailers, internal teams, etc.)
  to fully define our retail technical strategy
- Built & maintained numerous features on the website (checkout, shipping, search, filters, etc.) with NextJS / React

FEB 2021 - NOV 2023

#### **SSENSE**, Montreal - Software Developer 3

- Built **next-generation shipping / logistics infrastructure** to support new, in-house warehouse automation hardware

- Developed scalable NodeJS applications on AWS Lambda and DynamoDB to handle the shipment of billions of dollars of customer orders.
- Integrated global carriers (FedEx, UPS, DHL, etc.), with warehouse hardware infrastructure.
- **Coached junior engineers** on good code practices, architecture / design, and otherwise supported their growth during the development of this project

FEB 2019 - FEB 2021

# Sensibill, Toronto - Senior Backend Developer

- Design and implement API features on NodeJS with TypeScript and MongoDB to support the core product
- Developed new "Extraction as a Service" product from the ground up, originally written in Go/MySQL, but later ported to TypeScript/Mongo for integration with the rest of our ecosystem
- Assess and address security vulnerabilities and bugs in API code
- Integrate Sensibill web platform with iOS Swift and Android Kotlin based internal SDKs

JUN 2017 - FEB 2019

#### **Ovandi, Toronto** – CTO / Co-founder

- Technical leader of cannabis consumer electronics startup
- Built prototype hardware
- Wrote firmware with HTTP server and Bluetooth interfaces in C++
- Designed and developed react-native and NodeJS applications to interface with the hardware
- Developed technical strategy in a resource-constrained business
- Lead junior developers to deliver features for the Ovandi platform and grow their skillset
- Lead the design team in UX development efforts

OCT 2016 - JUN 2017

# Mark 43, New York/Toronto - Software Developer

- Build new features for the Cobalt law enforcement platform in React & Redux (https://www.mark43.com/rms/)
- Ensured backwards compatibility with existing backbone/knockout code
- Refactor code to shared modules across the Mark43 suite of tools / development teams

MAR 2014 - OCT 2016

#### Rangle.io, Toronto - Software Developer

- Engaged in a number of full-stack Javascript consulting engagements
- Full stack apps at the time consisted of Angular 1.x/React frontends, with Express/NodeJS backends.
  These were built from scratch, or extended existing client codebases