

Rafael Keramidas

Senior Full Stack Engineer, hacker & aviation enthusiast

PERSONAL STATEMENT

With over 10 years of experience across diverse industries, I have developed a robust skill set, enabling me to tackle challenges of any scale. My passion for technology and commitment to making a difference have driven impactful contributions in both large corporations and small startups. I take pride in creating innovative solutions used by millions worldwide. Alongside my technical expertise, I've cultivated strong leadership and mentoring skills, fostering collaborative work environments and supporting team growth.

EXPERIENCE

Since April 2023, I have worked on personal endeavors and projects in Zanzibar, which include:

- Building a photo booth inside a Tuk Tuk (@thephototuk) using a Raspberry Pi, camera module, touch screen and professional photo printer.
- Setting up a robust network and home automation system for my parents new home. [See article on blog.](#)
- Learning how to fly airplanes (PPL) and maintain them (engine mechanics and cell maintenance). Also experimenting with aviation technology (EFB, ADS-B, Stratux) and building my own flight recorder (audio & flight data).
- Creating a flight comparison engine for local flights in Tanzania ([flights.tz](#)) which is launching later this year.

Senior Back End Engineer

Craft Docs



Oct 2022 to Apr 2023 Remote / Budapest, Hungary

As part of the backend team at Craft, I implemented key features like custom domains and an AI assistant while managing daily tasks such as bug fixing and mentoring junior developers. I also supported the security team by assisting with SOC 2 implementation, vulnerability reporting, and patching. Additionally, I contributed to maintaining platform integrity by developing automated scans to prevent abuse of publicly shared documents.

Tech: NodeJS, TypeScript, Serverless, AWS, OpenAI

Senior Full Stack Engineer

Riff



Apr 2022 to Jul 2022 Remote

In this early-stage product, I focused on implementing new features like dynamic video display, while optimizing the desktop client and web application for minimal system impact. Working in a small team, I introduced an IaC framework using Terraform with containerized servers (Docker/AWS Fargate) and set up a CI/CD pipeline (GH Actions). This reduced time spent on operations, allowing us to focus more on feature development and bug fixing.

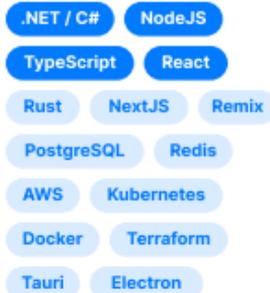
Tech: NodeJS, TypeScript, React, Electron, Terraform, AWS

MY INFO

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SKILLS

TECHNOLOGY



LANGUAGES

English	Native level
French	Native language
Swiss German	Second language
German	Advanced
Greek	Basics
Swahili	Basics

INTERESTS



Senior Full Stack Engineer

StreamBee



Jul 2021 to Apr 2022 Remote / Prague, Czechia

I re-architected the server for horizontal scalability, integrating Redis as a backbone. This also allowed for updates with none to minimal downtime, which led to accelerating our release pace. During my time at StreamBee, my main task was developing the stream collection pipeline to handle high-volume data from various sources, maintaining real-time states in Redis and periodically writing data to ClickHouse. I also managed BAU tasks, including bug fixes and new feature development on both backend and frontend.

Tech: .NET/C#, NodeJS, React, Postgres, Redis, ClickHouse, Kubernetes

Senior Full Stack Engineer

Trezor / SatoshiLabs



Jul 2020 to Jun 2021 On-site / Prague, Czech Republic

I developed and maintained Trezor Suite (companion app for the Trezor hardware wallet) and Trezor Connect (third-party integration library). My primary focus was the desktop application for Trezor Suite across Windows, Mac, and Linux, where I implemented features like automatic updates and TOR, and made improvements in stability and security. I also built a transaction search engine, export functionality, and optimized builds.

Tech: NodeJS, TypeScript, React, Electron, Cryptocurrencies

Senior Frontend Engineer

Wargaming



Jul 2019 - Jul 2020 On-site / Prague, Czech Republic

I developed UI features for World of Tanks (PC) using Coherent Gameface with React, TypeScript, SCSS, and Webpack. As the senior team member, I made architectural decisions, advised on implementations, optimized code and workflows, and created tools to boost team productivity. I also worked on various game client tasks using Python and C++.

Tech: NodeJS, TypeScript, React, Python, C++, CEF

Full Stack Engineer

Lloyds Banking Group



Apr 2019 - Jun 2019 On-site / Edinburgh, United Kingdom

Development of internal and public facing APIs using NodeJS as well as front-end applications for the Internet Banking website using React with Redux.

Tech: NodeJS, Typescript, React, Redux

EDUCATION

Flight School - PPL

ZRP1

2023 - current

Zanzibar, Tanzania

Professional School - IT Generalist CFC

EPSIC

2009 - 2013

Lausanne, Switzerland

Final grade 5.4/6 (A-)
Received Award of Excellency

Secondary School - VSG

Collège des Rojalets

2007 - 2009

Coppet, Switzerland

Final grade 5/6 (B)

Full Stack Engineer

Rockstar North / Games



📅 Sep 2015 to Apr 2019 📍 On-site / Edinburgh, Scotland

At Rockstar North, I worked on the Social Club website, overlay and launcher for PC games, and internal tools using ASP.NET MVC and Web API (C#), NodeJS, React, and BackboneJS. My responsibilities included code maintenance, implementing major features, and deploying updates. I also developed tools to automate tasks and enhance team productivity. I contributed to games like Grand Theft Auto V, L.A. Noire Remaster, L.A. Noire VR, and Red Dead Redemption 2, supporting the Social Club platform with over 100 million members.

Tech: .NET/C#, SQL Server, React, Redux, Redis, MongoDB, NodeJS, CEF

Administrator / Developer

GTAOnline.fr



📅 Apr 2008 to Sept 2015 📍 Remote

As the sole system administrator for the largest French online community around Grand Theft Auto multiplayer, I ensured the availability of websites, voice servers (TeamSpeak), and game servers (SA-MP, MTA:SA) for thousands of daily users. I collaborated with other developers to expand game servers and web applications, including a novel web portal for player stats and rankings. Additionally, I created open-source tools for the community to enhance game servers, developed Android companion apps, and built web tools like online maps for the game.

Tech: Citrix XenServer, GNU/Linux, PHP, MySQL, Nginx, Pawn

IT Apprentice

IBM



📅 Jul 2009 to Aug 2013 📍 Jul 2009 to Aug 2013

During my IT apprenticeship at IBM BSC in Prilly, Switzerland, and part-time IT studies at EPSIC in Lausanne, I rotated through various IT domains, including tech support and Windows server administration. Due to my strong performance, in the third year, I spent six months each in the IT Security and Unix teams. In my final year, I focused on Network Security, where I administered Cisco ASA and Linux firewalls and developed a firewall monitoring tool for my diploma project.

Tech: Cisco ASA, GNU/Linux, AIX, Nessus, PHP

PROJECTS

Flights.tz

Personal - 2024

Noting the difficulty of finding local flights in Tanzania and the limitations of major platforms, I created a flight comparison engine called flights.tz. Built with Remix, TypeScript, Elysia, Mantine, and Bun, the platform connects directly to airline booking systems, offering detailed filters and a strong focus on SEO and user experience. The project is nearly complete and is awaiting operating licenses in Tanzania, with a launch expected by the end of 2024.

The Photo Tuk

Collaboration - 2023

Inspired by the idea of a mobile photo booth, I created The Photo Tuk, a Tuk Tuk-based photo booth in Zanzibar. My role involved sourcing components like a photo strip printer, touch screen, bank note reader, camera, and single board computer, and tie everything together. I developed a custom solution using .NET/C# and AvaloniaUI with Linux's DRM, and set up a web server for real-time stats and parameter adjustments for the booth operator. The project is now operated by a business partner across Zanzibar.

No Coin

Personal - 2017

In response to CoinHive's launch (a product that allowed crypto mining in browsers) I developed No Coin, a browser extension to notify users and control crypto mining. The goal was to prevent abuse for user's computer resources, which quickly started spreading. The extension was well-timed, gaining media attention from Wired, Motherboard, and Gizmodo, and reaching over one million active users across Chrome, Firefox, and Opera. It became obsolete as browsers incorporated built-in crypto mining protections.

Firewall revalidation tool

IBM - 2013

For my final graduation project, I developed a firewall rule revalidation tool that connects to Cisco ASA firewalls via SSH and analyzes rules. Built with PHP, JavaScript (AJAX), Bash, and MySQL, the project was completed in three weeks (120 hours) and included a full report and user documentation. I received the highest mark (6/6) for this work.

SUCCESS STORIES

Modernizing deployments

Riff - 2022

At Riff, I revamped the infrastructure, replacing AWS EC2 virtual machines with Terraform for standardized setups, containerizing server code for ECS Fargate, and using S3/CloudFront for static front-end builds. I automated deployments with GitHub Actions, which simplified and expedited environment creation and updates, reducing deployment times from over an hour to just a few minutes. In addition, this reduces the risk of human error and has proven to be useful for disaster recovery.

High volume data collection and storage in ClickHouse

StreamBee 2021 - 2022

At StreamBee, I tackled the challenge of collecting and storing large volumes of live stream data from sources like API polling, webhooks, and IRC chats. I chose ClickHouse and Redis to handle this. My design updates streamer states in Redis for real-time UI reporting and periodically took snapshots to ClickHouse for historical analysis. This approach provided a scalable solution, offering real-time data with Redis and fast analytics with ClickHouse.

Bringing the Trezor Suite desktop app to the next level

SatoshiLabs 2020 - 2021

I took ownership of the Trezor Suite desktop application, which uses Electron for web integration and system features. I refactored the code for modularity and improved security, following best practices. I also implemented key features like auto-updater and TOR proxying for enhanced anonymity. These improvements made Trezor Suite desktop the recommended and most stable way for users to interact with Trezor devices.

Improving the build pipeline by 10x

Wargaming 2019 - 2020

When Gameface was added to World of Tanks, it introduced modern web technologies (React, Sass, Webpack) for in-game UI development. The team's inexperience with these technologies led to an unoptimized build pipeline. By optimizing the Webpack configuration, I reduced initial build times from 30 seconds to 3 seconds and rebuilds to under 100 milliseconds. This greatly improved the developer experience by making code changes instantly visible and accelerating development.