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Senior Software Engineer @ Spotify

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HIGHLIGHTS

Seasoned software engineering leader with 15+ years of experience, spanning roles from **technical co-founder** to **CTO** and **VP of Technology**. Leveraging a strong foundation in **mathematics and computer science** to design and implement scalable, high-performance systems. Proficient in multiple tech stacks including **Java, Python, and TypeScript**. Proven track record of fostering **continuous improvement** and **collaboration** through agile methodologies.

LATEST PROFESSIONAL EXPERIENCE

Senior Software Engineer

(5 years) December 2019 – Present 📅

Spotify

Stockholm, Sweden 📍

I joined Spotify in 2019, initially as a consultant, before transitioning to a full-time employee after a few months.

My first mission was to **mentor** and **lead** a team of engineers in replacing a **legacy admin dashboard** with new technologies while modernizing and innovating the product. I successfully taught **TypeScript** and **React** to the team while creating a new **microservice-based architecture** using **async Python**. We innovated by developing a new **transport protocol** for **low latency** and **high reliability**. The product has been in successful use and continuous development for five years, with virtually no tech-related incidents. On the product side, we established close collaboration with our **stakeholders** and **users**, conducting numerous **user studies** and utilizing Spotify's then-new **design language** to deliver a highly usable product.

During my tenure with the team, I was responsible for defining, prioritizing, and leading **tech initiatives**. By creating a collaborative setup and running **tech retrospectives**, I managed to reduce **technical debt** and maintain high-quality services with low maintenance effort. Some of my achievements include leading and educating the team on the importance of **SLIs** and **SLOs** for reliability and quality, implementing our first SLOs, and establishing a weekly meeting to review our SLOs and other reliability-related dashboards, fostering a culture of **continuous improvement**.

Spotify, I was responsible for **onboarding** and mentoring the new team replacing us, ensuring their success.

My next journey at Spotify involved transforming the **Customer Support tooling** Product Area into a **platform**. For nine months, I led the effort to define and implement a new product as the first successful example of a platform for our product area. I led a team of senior engineers in an **RFC-driven approach**, establishing close relationships with stakeholders and designers to identify needs and progress through different **MVP phases** to launch a full product. I was directly responsible for coordinating and collaborating with stakeholders, negotiating requirements and timelines, defining roadmaps, and ensuring we met our commitments. My focus on **reliability**, **scalability**, and **extensibility** resulted in a platform that easily onboards new lines of business and customer channels while streamlining integration with third-party vendors used by Customer Support.

After leading the initial definition, design, and launch of the product, I took ownership of the **frontend** component and mentored my team in frontend technologies while actively contributing to other areas. One initiative I led during this period was reducing the number of **PagerDuty alerts** from our legacy systems. I implemented a **data-driven approach** by creating metrics on alert frequency, sources, false positive rates, and categories. Subsequently, I guided the team in improving processes and enhancing our quality culture by conducting **post-mortems** for incidents and reducing alert noise. We successfully reduced PagerDuty alerts by over 80%.

My latest focus is on the **reliability working group** of our product area, of which I am a founding member. Our first initiative, which has become a product area-wide effort with TSG approval, was to generate our first-ever **monthly availability report** for our product area.

TOP SKILLS

Backend

Java • Python • Ruby •
Elixir • Go • NodeJs •
ExpressJs • Google
Cloud Platform (pub/sub
• bigtable • GKE) •
PostgreSQL • Redis •
gRPC • Rest API •
GraphQL

Frontend

Javascript • Typescript •
React • NextJs • HTML •
CSS • SASS • CSS in JS
• CSS Modules • Atomic
CSS • Service Workers •
Progressive Web App
(PWA)

Tools

Docker • K8s • CI/CD •
Bash • Linux • NGINX •
Webpack • Babel • NPM
• Yarn • Jest • Cypress •
Git

Methodologies

Scrum • Kanban • Agile •
System Design •
Algorithms and
Datastructures • TDD •
BDD • OOP • FP • SOLID

EDUCATION

🎓 Master of Science in
Computer Science

(Dropped out)

Sharif University of
Technology
2014 – 2016

🎓 Master of Science in
Astrophysics

(Dropped out)

Institute for Advanced
Studies in Basic Sciences
(IASBS)
2012 – 2013

🎓 Bachelor of Science
in Applied Mathematics

Kharazmi University
2007 – 2011

FORMER PROFESSIONAL EXPERIENCE

Consult Software Engineer

February 2019 – December 2019 📅

JustTech

Stockholm, Sweden 📍

From an **SWE Consultant** to an **Interim CTO**, I held diverse responsibilities and gained varied experiences at JustTech. During this period, I had two distinct assignments: one with a small startup named Sqore, and another with Spotify, where I contributed my expertise. Concurrent with my Spotify assignment, I was appointed as the **Interim CTO** of JustTech. My responsibilities encompassed attending **board meetings**, overseeing the **hiring** process, managing **employee departures**, mentoring staff, and facilitating the growth of our human resources department. I facilitated this transition until joining Spotify as a full-time employee.

At **Sqore**, I was part of a three-engineer team managing substantial operations. My expertise quickly earned their trust, enabling me to enhance their technical infrastructure. We utilized an in-house **Kubernetes cluster** with a diverse technology stack, including **Ruby on Rails**, **TypeScript**, **React**, **PostgreSQL**, **AirTable**, and **Elixir** - some of which I introduced. This stack supported product development, marketing, analytics, and various technical requirements. Our platform bridged the gap between students and universities in higher education, serving numerous global universities as clients and millions of students as users. Our products were crucial for customer support, marketing, and analytics operations.

Freelance Software Developer

January 2018 – January 2019 📅

Various Projects

Istanbul, Turkey 📍

Throughout the year, I undertook various projects, showcasing my versatility in software development. Notable among these was the development of a **scientific library** in **Crystal**, a statically-typed, compiled language known for its performance and syntax inspired by Ruby. Another significant project involved the transformation of a web application, migrating from a **React/Redux/REST** architecture to a more modern stack utilizing **ReasonML**, A syntax extension and toolchain for OCaml, focused on JavaScript and native compilation, and **GraphQL**. These projects not only demonstrated my proficiency in diverse programming languages and frameworks but also highlighted my ability to adapt to evolving technologies in the field of software development.

Technology Stack: React, Redux, ReasonML, GraphQL, Crystal

CTO & Agile Coach

March 2017 – December 2017 📅

Abgostaran

Tehran, Iran 📍

As the **Chief Technology Officer (CTO)** for a company contracted by the **Ministry of Agriculture**, I played a pivotal role in shaping the technological direction and team composition. My responsibilities extended beyond technical leadership to include serving as an **Agile Coach**, fostering an environment of iterative development and continuous improvement.

Key aspects of my role included:

- **Technology Selection:** After careful evaluation, I chose **Microsoft SharePoint** as our primary backend and automation platform, leveraging its robust features for document management and workflow automation.
- **Custom Frontend Development:** To enhance user experience and meet specific project requirements, I spearheaded the creation of a bespoke frontend using **Vue.js** and **Vuex** for state management. This modern, reactive interface significantly improved usability and performance.
- **Backend Integration:** Implemented a custom proxy server to facilitate seamless communication between our Vue.js frontend and the SharePoint backend, ensuring optimal data flow and system performance.
- **Talent Acquisition:** Responsible for recruiting and hiring skilled developers, building a high-performing team capable of executing our technological vision.

This role showcased my ability to blend strategic technology choices with hands-on development, while also nurturing an agile, high-performance team in a government-contracted environment.

Technology Stack: SharePoint, Vue.js, Functional Programming, Clojure

FORMER PROFESSIONAL EXPERIENCE

Senior Consultant

January 2016 – June 2017 

IranTIP

Tehran, Iran 

IranTIP is an innovative platform designed to connect **Iranian companies** with **global investors**. As a key member of a highly skilled four-developer team, I played a crucial role in architecting and implementing the complete **frontend structure** of the website.


My primary contributions included:

- **Frontend Architecture:** Established a robust frontend framework using **React**, a popular JavaScript library for building user interfaces, integrated with **MobX** for efficient state management.
- **Development Environment:** Configured a comprehensive development environment utilizing **Webpack** for module bundling and **TypeScript** for enhanced code reliability and maintainability.
- **DevOps Implementation:** Set up essential **DevOps tools**, including a **GitLab** instance for version control and implemented **CI/CD** (Continuous Integration/Continuous Deployment) pipelines to streamline the development process.


This project showcased my ability to leverage modern web technologies and development practices to create a scalable, maintainable, and efficient web application. The combination of React's component-based architecture, MobX's reactive state management, and TypeScript's static typing resulted in a robust and performant frontend solution.

Technology Stack: React, MobX, TypeScript, Webpack, GitLab CI/CD

Vice President of Technology

January 2016 – June 2017 

Intelligent Information Solutions Center (IIS)

Tehran, Iran 

As the Vice President of Technology at IIS, I spearheaded the implementation of a critical **subsystem** for the **nationwide portal** of the **Ministry of Education**. Due to contractual constraints, the use of major external dependencies was prohibited, presenting a unique challenge.

Key Achievements:

- **Frontend Innovation:** Led the frontend development, focusing on an intricate **Drag and Drop interface**. To meet the project's specific needs, I engineered a custom framework that hybridized elements from **React** and **Angular**.
- **Minimalist Dependency Approach:** Successfully implemented the complex interface using only **jQuery** with select plugins and **Hamt.js**, a lightweight data structure library employed as an alternative to ImmutableJS for **undo/redo functionality**.
- **Framework Integration:** Later integrated this interface into a more comprehensive framework built on **AngularJS**, demonstrating adaptability and scalability in our approach.
- **Multi-faceted Web Development:** Developed two distinct web interfaces: a **customer panel** and an **admin panel**, showcasing versatility in both frontend and backend development.
- **Project Diversity:** Managed and contributed to several additional projects, highlighting adaptability across various technological landscapes.

This role underscored my ability to innovate under constraints, lead complex technical projects, and leverage a diverse set of technologies to deliver robust, scalable solutions in a high-stakes educational technology environment.

Technology Stack:

- **Frontend:** React, Angular, TypeScript, jQuery
- **State Management:** Redux
- **DevOps:** Docker, Cloud technologies
- **Backend:** MongoDB, Redis, Python, Node.js, Ruby

FORMER PROFESSIONAL EXPERIENCE

CTO & Co-founder

May 2016 – March 2017 📅

Chejoori

Tehran, Iran 📍

As the **Chief Technology Officer** and co-founder of Chejoori, I was instrumental in designing and developing a comprehensive suite of products for our innovative startup. My responsibilities encompassed the entire technical stack, from mobile applications to backend infrastructure.

Key Accomplishments:

- **Mobile Application Development:** Engineered a robust mobile app using **React Native**, enabling cross-platform functionality and rapid development cycles.
- **Chatbot Integration:** Developed an interactive **chatbot** for the **Telegram** platform, enhancing user engagement and providing an additional channel for customer interaction.
- **Infrastructure Design:** Architected and implemented a scalable infrastructure for our services based on **Docker**, ensuring flexibility, consistency, and ease of deployment across different environments.
- **Database Management:** Established and maintained database systems, focusing on performance optimization and data integrity to support our growing user base.

This role showcased my ability to wear multiple hats in a startup environment, from strategic technology planning to hands-on development across various platforms and technologies. My experience at Chejoori demonstrated my capacity to lead technical initiatives in a fast-paced startup environment, leveraging cutting-edge technologies to build a cohesive and scalable product ecosystem.

Technology Stack:

- **Frontend:** React, ReactNative, ClojureScript
- **Backend:** Python, Clojure
- **Infrastructure:** Docker, PaaS
- **Database:** RethinkDB

CTO & Co-founder

April 2013 – January 2016 📅

Kelasi

Tehran, Iran 📍

As the **Chief Technology Officer** and co-founder of Kelasi, I led the technological vision and implementation for our innovative startup in the **education technology** and **MOOC** (Massive Open Online Course) sectors. Our platform leveraged cutting-edge technologies to deliver a robust and scalable learning solution.

Key Achievements:

- **Backend Architecture:** Designed and implemented a sophisticated server infrastructure based on **Ruby on Rails**, adopting a **microservice architecture** to ensure scalability and maintainability.
- **Infrastructure Management:** Utilized **Docker** for containerization, streamlining deployment processes and enhancing system reliability across different environments.
- **Frontend Development:** Spearheaded the creation of a dynamic and responsive frontend using **ClojureScript** and **React**, providing an engaging and interactive user experience for our educational platform.
- **Technology Integration:** Successfully integrated diverse technologies to create a cohesive and efficient full-stack solution, balancing performance with user-centric design.


This role demonstrated my ability to harness emerging technologies in creating an innovative educational platform, showcasing my skills in both strategic technology planning and hands-on development. My tenure at Kelasi underscored my capacity to lead technical initiatives in a startup environment, effectively utilizing modern web technologies to build a scalable and user-friendly educational platform.

Technology Stack:

- **Backend:** Ruby on Rails
- **Frontend:** ClojureScript, React
- **Infrastructure:** Docker
- **Architecture:** Microservices

FORMER PROFESSIONAL EXPERIENCE

Web Developer & Designer

2012 – 2013 

Student Help Center

Cyberjaya, Malaysia 

In this role, I spearheaded the development and design of a comprehensive website solution for the Student Help Center, showcasing my full-stack development capabilities.


Key Accomplishments:

- **End-to-End Development:** Engineered a complete website from conception to deployment, demonstrating proficiency in both frontend and backend technologies.
- **Content Management System Integration:** Leveraged the power of **Drupal**, a versatile CMS, to create a dynamic and easily maintainable web platform.
- **Custom Functionality:** Utilized **PHP** to develop bespoke features, tailoring the site to meet the specific requirements of the Student Help Center.
- **Interactive User Interface:** Implemented responsive and user-friendly interfaces using **jQuery**, enhancing overall user experience and engagement.


This project underscored my ability to independently manage a comprehensive web development initiative, effectively utilizing industry-standard technologies to deliver a robust and user-centric online platform. My work at the Student Help Center demonstrated my capacity to blend technical expertise with design sensibilities, resulting in a fully functional and aesthetically pleasing web solution.

Technology Stack: PHP, jQuery, Drupal

Web Developer, Freelancer, & Consultant

2012 – 2013 

Various Places

Tehran, Iran 

During this period, I engaged in diverse projects across multiple domains, showcasing my versatility and adaptability in software development.

Key Projects and Achievements:

- **Restaurant Management Software:**
 - Developed a desktop application for restaurant management and accounting using **Python** and **Qt**.
 - Later reimplemented the application using **JavaScript** and **Node-webkit**, demonstrating adaptability to evolving technologies.
- **Dynamic Programming Application:** Engineered a desktop application using **C++** and **GTK**, focused on dynamic programming algorithms.
- **Extensible CMS Platform:** Created a ground-up, customizable **Content Management System** primarily targeted at universities, showcasing my ability to develop scalable web solutions.
- **Web Design Company:** Founded a web design firm leveraging cutting-edge technologies, highlighting my entrepreneurial spirit and technical leadership.
- **Local Business Mapping Startup:** Co-founded a startup to implement a **local map service** for finding nearby businesses, demonstrating my ability to identify market needs and develop innovative solutions.

This period of my career underscored my ability to work across various technologies and platforms, from desktop applications to web services, and my capacity to blend technical expertise with entrepreneurial initiatives. My diverse experiences during this time demonstrated my versatility as a developer, my ability to quickly adapt to new technologies, and my entrepreneurial drive in the tech industry.

Technology Stack:

- **Languages:** Python, PHP, C++, JavaScript
- **Frameworks/Libraries:** Qt, GTK, Node-webkit
- **Areas:** Web Development, Desktop Applications, CMS, Mapping Services