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A technical architect with 8 years of experience, I transform complex challenges into cutting-edge solutions by integrating Software Engineering, Full Stack Development, and Generative AI.

My journey through both agile startups and large corporations has centered on architecting intelligent, high-impact systems—consistently delivering tangible results and enhancing operational efficiency. I am driven to play a key role in projects where advanced AI pioneers new frontiers in business value and technological innovation.

EXPERIENCE

Senior Software Engineer at Al Jazeera

Nov 2023 - Present

- To advance content creation capabilities, played a key role in the development and integration of **LABIB**—a proprietary foundational model (Python's Hugging Face, Llama, GCP)—into the content management system. This initiative **transformed editorial workflows, achieving a 20% average time saving** for news reporters and **boosting video session length by 8%** through AI-powered video playlist substitutions.
- To deepen user understanding and inform product strategy, led the strategic migration from Google Optimize to Mixpanel for advanced analytics, orchestrating **over 80 A/B experiments, 55 of which yielded positive KPI increments**, using Node.js, NestJS, PostgreSQL, and MongoDB.
- To combat legacy code challenges and enhance maintainability, championed a major refactoring initiative. Spearheaded the migration of **40%** of React components from JavaScript to TypeScript, which **significantly improved developer experience (DX) and streamlined onboarding** for new engineers.

Senior Software Engineer at Deel IT (formerly Hofy)

Dec 2021 - Nov 2023

- To address high customer churn and support ticket volume, focused on iteratively refining the existing self-serve onboarding experience. By leveraging JavaScript, TypeScript, React, and Amplitude, shaped a more intuitive user journey that directly resulted in a significant reduction in customer churn and a **25% reduction in support tickets**.
- To resolve critical scalability issues and high operational costs of the legacy shipping microservice, contributed to its re-architecture on AWS, migrating the service from NestJS to Go and its database from MongoDB to PostgreSQL. This achieved seamless major shipping API integration, improved scalability, reduced operational complexity, and **cut its AWS operational costs by 57%**.
- To support a company-wide initiative for new team member integration, mentored junior developers through a 3-month program involving weekly calls and pair coding sessions, focusing on accelerating

their proficiency in TypeScript, React, and the development workflows for the self-serve product, which resulted in **quicker ramp-up and earlier detection of misunderstandings** due to unfamiliarity with the product.

Software Engineer at Turing

Aug 2020 - Dec 2021

- To empower HR clients with efficient talent showcasing and streamline profile sharing, developed a key self-serve platform feature leveraging JavaScript, TypeScript, and React that enabled them to curate and distribute developer profiles, directly **boosting client referrals by 15%**.
- To establish a robust data foundation for improved product strategy, pioneered the adoption of comprehensive analytics tracking by **integrating Amplitude into 80% of the analytics codebase** (built with React, MongoDB, AWS, and Python's FastAPI), an initiative that significantly enhanced A/B testing precision and delivered clearer data-driven outcomes by validating/invalidating hypotheses for product features.
- To address the marketing department's need for greater customization on newsletters, designed and deployed a full-stack internal newsletter platform leveraging Next.js, NestJS, PostgreSQL, and SendGrid API, which successfully enabled the distribution of **over 25k emails weekly** and empowered finely targeted campaigns.

Software Engineer at Design With Friends

Dec 2018 - Aug 2020

- To address the inefficiencies and costs of manual data acquisition for major US retailers (Amazon, Houzz, Walmart, Etsy), innovatively architected an automated scraping microservice (Serverless Framework, AWS Lambdas, TypeScript, Puppeteer), and through iterative development culminating in a second, optimized version, automated data fetching, eliminated the need for two freelance roles, and **slashed the microservice's operational costs by 68%**.

Software Engineer at CoderPad (formerly CodinGame)

Feb 2017 - Dec 2018

- To address internal sales team inefficiencies, developed a bespoke internal tool (React, Node.js, Express, PostgreSQL) that automated critical workflows, significantly boosting team efficiency. Concurrently, contributed to the migration of **30%** of the legacy AngularJS codebase to React, which enhanced application performance and maintainability.

EDUCATION

MENA Startups Bootcamp

Sep 2015 - Dec 2016

Masschallenge, USA

During an intensive entrepreneurship bootcamp, developed **Jobzilla, a startup enabling global remote work for software engineers**. Gained firsthand experience in product ideation, market validation, and

navigating early-stage startup dynamics, achieving initial traction before pivoting due to co-founder misalignment. This experience provided valuable lessons in resilience and business strategy.

Master's Degree - Computer Science

Oct 2010 - Jun 2015

National School Of Applied Sciences, Morocco

Completed a comprehensive curriculum in core computer science disciplines, including advanced algorithms, data structures, software engineering, operating systems, networking, database management, and distributed systems. Acquired specialized knowledge through coursework in game development, machine learning, and web technologies, with a strong emphasis on applying theoretical foundations to practical, project-based work.

SKILLS

- **Programming Languages & Frameworks:** Python (Hugging Face, Llama, FastAPI), Node.js, NestJS, JavaScript, TypeScript, React, Go, Next.js, Express.
- **Databases:** PostgreSQL, MongoDB.
- **Cloud Platforms & DevOps:** Google Cloud Platform (GCP), Amazon Web Services (AWS, AWS Lambdas), Serverless Framework.
- **Tools & Technologies:** Mixpanel, Amplitude, Puppeteer, SendGrid API.
- **Methodologies & Concepts:** A/B Testing, Data Analytics, Microservice Architecture, API Design & Integration, Web Scraping, Generative AI, System Design, Performance Optimization, Machine Learning.