# **Alaa Emam**

Github Profile
Personal Site
LinkedIn

# **Summary**

**Frontend Engineer (Javascript, React and Vue)** with **2 years** of experience. Strong ownership mindset, proficient in frontend technologies, excellent communication and collaboration skills, and a passion for learning and adapting to new technologies

# **Professional Experience**

# Front-End Developer RDI

Oct 2023- Present Hybrid, Egypt

- RDI, also known as The Engineering Company for the Development of Digital Systems, is a leading company in producing Optical Character Recognition (OCR) Technologies, Natural Language Processing (NLP) Technologies, and Speech Technologies. The company offers unique and innovative applications and software such as ID Reader, Speech to Text, Arabic Discretization, and Text to Speech.
- As the sole front-end developer on the team, implemented responsive web interfaces using React.
- Utilized TypeScript for type-safe and scalable web application development.
- Developed and maintained advanced web applications for contact centers, significantly improving customer service efficiency and accuracy.
- Built and integrated web interfaces for Al-driven applications and chatbots, enhancing customer interactions and support.
- Built and integrated web interfaces for sophisticated text processing and speech recognition web applications. Contributed to solutions in NLP and OCR domains.
- Collaborated with back-end developers to integrate APIs, ensuring smooth data flow between front-end and back-end systems.

# Software Engineer Intern (Certificate)

April 2023- Aug 2023 Remote, USA

<u>Manara</u>

- Exhibited strong communication skills and a teamwork-oriented approach in over 15 technical and behavioral interviews, receiving commendations from interviewers and securing several job offers.
- Participated in an intensive 7-month program, concentrating on problem-solving and technical skills.

# Software Engineer Intern (Certificate)

Aug 2022- Nov 2022 Egypt

Et3 - Tomorrow Information Technology

- ET3, an Egyptian enterprise, offers quality, cost-effective IT solutions for complex challenges.
- Contributed to the administration system using Django for a market company called Adhoc, optimizing the UI for the admin panel and improving file import and export processes for enhanced efficiency.
- Created a dashboard for the Egyptian National Railway as part of a frontend project; utilized the D3.js data visualization library and developed advanced chart features and improved usability

## **Projects**

# **CSX | Contact Center Analytics**

- Developed an Arabic Automatic Speech Recognition (ASR) model for contact center environments, supporting English technical terms to improve customer interaction analytics.
- Technologies: React, React Query, React Table, Shadon UI, Tailwind CSS, React Hook Form, Zod, Recharts, Vitest, React Testing Library, JSDOM, MSW

#### Sotoor

- Designed OCR software that converts scanned documents (including Arabic, English, and other languages) into editable, searchable files. The software maintains the original layout of the documents, ensuring accuracy and ease of use for digitizing physical records.
- Technologies: React, React Query, Shadon UI, Tailwind CSS, React Hook Form, Zod, jsPDF

## **Tashkeel**

- Engineered text processing technology for precise automatic diacritization of Arabic text. Facilitates improved readability and correct pronunciation for users, especially in educational and professional settings.
- Technologies: React, React Query, Styled-components, Jest, React Testing Library, JSDOM, MSW

#### Kateb

- Developed a comprehensive speech-to-text application with both website and portal versions. The application processes audio and video files to provide accurate transcriptions.
  - Website Version: Implemented using modern web technologies to ensure a seamless user experience for transcription services.
  - **Portal Version**: Enabled real-time stereo recording with two microphones using WebSocket, allowing for extended recording sessions and reliable audio capture.
  - Technologies: React, Typescript, React Query, Shadon UI, Tailwind CSS, React Hook Form,
     Zod, Vitest, React Testing Library, JSDOM, MSW

## **Natiq**

- Created text-to-speech technology that converts Arabic text into natural-sounding speech. This
  technology enhances accessibility and user experience, particularly for visually impaired users and
  educational applications.
- Technologies: React, React Query, Styled-components, Jest, React Testing Library, JSDOM, MSW

# Chatbot

- Developed a sophisticated conversational chatbot capable of providing voice and text responses for various applications, including Daleel for <u>NIDLP</u>, Hajeh, prayer and Linguistics Alternatives.
- Technologies: Typescript, React, React Query, Shadon UI, Tailwind CSS, WebSocket

# **Technical Skills**

Languages: HTML, CSS, JavaScript (ES6+), TypeScript, Python.

Libraries & Frameworks: React, Vue, jQuery, Redux, Firebase, Bootstrap, Tailwind CSS, Shadon UI, Ant

Design, PrimeVue and Vuetify 3.

Testing: Vitest, Jest, JSDOM, React Testing Library, Cypress and MSW

**Operating Systems:** Linux, Windows.

**Tools**: Visual Studio Code, Git. **Familiar:** Flask, Django, Node.js.

## **Education**

Beni-Suef University B.S. in Computer Science

Sep 2019 - July 2023