

davidsilveira.3.djs@gmail.com 21 Palmer Way, Wilmington, Massachusetts 01887

## PROFESSIONAL SUMMARY

A skilled software engineer with expertise in AI and machine learning, specializing in developing advanced software solutions in healthcare and recruitment. Proven experience in collaborating with teams and high-profile clients to deliver innovative features and scale-able products. Known for a strategic approach to problem-solving and a strong ability to adapt to new technologies, driving efficiency and excellence in software development.

## **SKILLS**

Typescript

React.js

Django

• Linux

- Javascript
- Python
- Bash
- Docker

## **EXPERIENCE**

**Lead Software Engineer, Founder, Easy Covers Software**, May 2023 - Current, Wilmington, Massachusetts

- Launched a pioneering venture to develop a next-generation ATS software, leveraging state-of-the-art generative AI and machine learning technologies to revolutionize the recruitment process.
- Developed the core software platform using Django (python framework) for a robust backend and Next.js (typescript framework) for a dynamic frontend, ensuring high performance, scalability, and security through a nginx reverse proxy setup.
- Designed and implemented an ASR pipeline, integrating open source software Kaldi for accurate speech-to-text decoding and Hugging Face models for advanced speaker diarization, setting a new standard in recruitment technology.
- Engineered an asynchronous communication system between the frontend and backend using Django Channels and ASGI server, resulting in a seamless and interactive user experience
- Established a microservices architecture, separating the transcription service for scalability and reliability, and utilized a Flask service for efficient backend communication via HTTP calls.
- Implemented a Redis messaging queue to manage resource allocation and prevent service overload, ensuring the system's high availability and responsiveness.
- Crafted detailed pitch decks and a comprehensive 25-page business plan, effectively communicating the software's value proposition to potential investors and securing

funding.

• Conducted numerous product demos for investors and potential business clients, demonstrating the software's innovative features and securing early interest and commitment.

Software Engineer, Forum Systems, Feb 2022 - May 2023, Needham, Massachusetts

- Worked with a team of 4 engineers on the development of QuantumSim, an Al-driven healthcare application, collaborating with C-level executives and top healthcare company clients to shape its architecture and innovative features.
- Contributed to the software's back-end and front-end development using Django and React.js, ensuring a responsive, user-friendly interface and reliable back-end API services.
- Innovated a contract risk analysis feature, employing advanced algorithms to evaluate and score PDF contracts based on predefined risk factors, directly contributing to a pivotal \$500,000 contract win
- Engineered a legal analysis feature integrating large language models, such as GPT and Llama, to distill critical elements from legal contracts, significantly reducing analysis time for healthcare teams.
- Developed a CRM tool within QuantumSim to facilitate seamless communication between healthcare professionals and legal teams, enhancing collaborative efforts and decision-making efficiency
- Authored extensive technical documentation and designed intuitive shell script shortcuts, greatly improving developer productivity and application service management.
- Implemented robust containerization and deployment processes using Docker and Bash scripting, ensuring secure and efficient on-premise installations of the application on Linux servers
- Drove agile development cycles, conducting bi-weekly feature demos to clients and gathering valuable feedback, fostering a client-centric development approach and continuous product improvement.

Undergraduate Research Assistant, University of Massachusetts Ameherst, Dec 2020 - May 2021, Amherst, Massachusetts

- Engineered an R-based analytical program to automatically classify emotional responses from study data into angry, fearful, or neutral categories, significantly advancing the lab research methodologies
- Conducted analysis on the effect of linguistic priming on emotional responses, contributing to a deeper understanding of cognitive and emotional persuasion mechanisms in psychological studies.

## **EDUCATION**

Bootcamp Diploma, Computer Science

Jan 2022

Columbia University - New York City, New York

Bachelor of Science, Neuroscience

May 2021