Mohamad EL-Chanti

Software Engineer

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PROFESSIONAL EXPERIENCE

2023 – 2024
Toronto, Canada

Full Stack Software Engineer, *Pen-Link Inc.*
Developed Frontend and Backend components for Geotime Enterprise and Geotime Live applications, leveraging diverse technologies.

- Developed a configurable watchdog mechanism to proactively alert the development team whenever a process experiences prolonged execution times, ensuring optimal application performance and preventing the persistence of open database connections.
- Enhanced the Geotime Enterprise application by introducing a user-friendly feature that enables users to create custom table layouts which they can utilize across cases using Aurelia and Spring frameworks.
- Relocated the Logstash service to dedicated servers across all Geoemt Enterprise environments using Ansible.
- Developed a server capable of converting GeoJSON data into Vector Tiles to render a wide range of events on the map efficiently.

2022 – 2022
Remote

Software Engineer, Co-Creator, *Trellis*
A CICD pipeline for serverless applications that streamlines configuration time to as little as 20 minutes, while also providing users with the flexibility to customize it for their needs.

- Implemented a build server using Fargate Task that gets its containers from ECR and communicates with AWS Secrets Manager to safely leverage users' secrets for authentication
- Designed and developed a backend that consists of a collection of serverless Lambda functions, an API gateway, and a DynamoDB Database
- Built a React-backed dashboard tool that allows users to manage their pipeline while abstracting away the complexities of deploying serverless applications, maximizing ease of use. Hosted with AWS S3 and delivered with AWS Cloudfront
- Authored a comprehensive case study on the design decisions encountered while creating the pipeline and the different problems Trellis solves. Can be viewed at https://trellis-deployment.github.io/

2017 – 2021
Fremont, California

Senior Manufacturing Equipment Engineer, *Tesla Motors Inc*
Installed, modified, and refurbished manufacturing equipment for the assembly of Model 3, Model Y, Model S, and Model X

- Integrated a VMT vision system and programmed Fanuc robots to improve the quality of urethane bead application on the roof and windshield glass for Model Y
- Worked with Excel VBA to analyze parts introduced with the PLAID launch for Model S and Model X to differentiate them from existing models

SKILLS

Back End
Node.js, Python, Express, Spring, RESTful APIs, Java

Front End
Aurelia, Angular, JavaScript, React/Redux, HTML, CSS, jQuery, Android Studio

Databases
PostgreSQL, SQLite, MongoDB, DynamoDB, Elasticsearch, Redis

Other
Docker, AWS Services, IaC tools (SDK, CDK, SST, Ansible), Git, Heroku, Digital Ocean

EDUCATION

2017
Waterloo, Ontario

BASC HONORS MECHANICAL ENGINEERING - MANAGEMENT SCIENCES OPTION, *University of Waterloo*

- Awards: Nominated to most innovative award for the fourth-year design project
- Project: Designed a PCBA with Bluetooth capabilities and programmed an Android application to communicate with an Arduino set and control an automated soccer ball launcher.