

Mohamad EL-Chanti


Software Engineer

✉ m.elchanti@gmail.com 📍 Toronto, Ontario, Canada 📁 Portfolio in LinkedIn 🐙 GitHub

TECHNICAL EXPERIENCE

Aug 2022 – Dec 2022

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/> 

Jan 2022 – Aug 2022

Full Stack Software Engineer, Self-Employed

Developed various personal and open-source software, some highlighted projects include:

- **Inspector:** A web-based tool for analyzing HTTP requests, designed primarily for troubleshooting web hooks (MongoDB, PostgreSQL, Pug, Express.js, RabbitMQ)
- **Airline Routes:** An open-source tool to track airlines, their routes and destinations. The tool displays a map where you can filter by airline or airport (React, Redux, PM2, Nginx)
- **TaskMaster:** An open-source tool that enables users to sign up, create personal to-do lists and track their progress (MongoDB, PostgreSQL, Pug, Express)

PROFESSIONAL EXPERIENCE

Nov 2017 – Dec 2021
Fremont, California

Senior Manufacturing Equipment Engineer, Tesla Motors Inc

- 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

Jan 2013 – Apr 2013
Toronto, Ontario

Android Developer (Intern), TD Canada Trust

- Worked on the front-end of the application using Eclipse to communicate with JavaScript on the backend to add the “mobile-to-mobile” payment of the TD android application

SKILLS

Back End

Node.js, Python, Express, Java, RESTful APIs

Front End

JavaScript, React/Redux, HTML, CSS, jQuery, Android Studio

Databases

PostgreSQL, SQLite, MongoDB, DynamoDB

Other

Docker, AWS Services, IaC tools (SDK, CDK, SST), 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.