Daniel Moran

Software Developer

danielmoran.ie
linkedin.com/danmorandev
github.com/danielmoran98
danmoran.dev@gmail.com

EXPERIENCE

General Motors, Ireland— *Software Developer*

August 2020 - PRESENT

- Built automation tools that streamlined monthly report creation of global site overviews from taking 3 days to manually create, to just 20 minutes, saving the company money by **freeing up 3 working days per month** previously spent by network architects, while also **increasing the accuracy of the data in the reports**.
- Created as part of a small team, an application that allowed for the manual testing and training of current in-use Natural language processing (NLP) agents. This application helped to **free up the AI Engineering team, and QA's time** by providing a single tool to monitor and improve performance of agents.
- Worked on some smaller scale innovation proof-of-concept projects, where I built a camera based VIN extraction tool, which would allow US based GM dealers to **speed up their time-consuming task** of manually inputting lists of VIN numbers to instead make use of computer vision APIs to automatically extract them from a photograph. After showcasing the working proof-of-concept to seniors, **positive feedback led to it being worked on at full scale by another development team**.
- Contributed in the company-wide effort of moving applications off of physical infrastructure and onto GM's PaaS infrastructure, **reducing the time and cost of maintaining each project**, becoming familiar with some DevOps concepts in the process such as setting up CI/CD pipelines.
- Plentiful experience working within agile teams and meeting with customers to understand their requirements.
- Primary technologies I used on these various projects were **React.js**, **Node.js**, **Flask** and **PostgreSQL** .

EDUCATION

Technological University Dublin
BSc (Honours) in Computing
September 2016 - May 2020

Awarded a **First Class Honours (1.1)**.

SKILLS

Core	Frameworks	Tools
JavaScript	React.js	Git
Python	Node.js	Azure DevOps
Java	Flask	AWS
SQL	Spring	Google Cloud
		PCF PaaS

AWARDS

Awarded **1st place** in the General Motors Ireland 2020 team-hackathon.

Awarded **1st place** in the General Motors 2020 competitive Tech-Week overall.

HOBBIES

Music

Cycling and fitness

Keeping up to date with new technologies

Podcasts

PROJECTS

A more detailed look at all of my projects can be found in my personal portfolio at **danielmoran.ie**, here are just a few of them.

Electronic Dispatch, Patrol and Resource System for An Garda Síochána

React, Node.js, JavaScript, MySQL, JWT, Various APIs

- Final year project built to explore ways of dealing with inefficiencies within An Garda Síochána.
- A React front-end and a Node.js back-end containing a RESTful API.
- Gives patrolling gardaí instant access to all known information about ongoing crimes in their division which is updated in real time in an easy to understand google maps interface.
- Allows dispatchers to input new crimes into the system, update ongoing crimes with newer information as well as notify nearby gardaí of the situation.
- Crime data is stored for statistical views and later data analysis.
- Responsive mobile and desktop friendly User Interface.

DailySale

Node.js, MySQL, Bootstrap 4, AWS

- A buy and sell web application.
- Users may create adverts and upload images to the advert page.
- Admin dashboard with newsletter sending ability.
- Comment/reviews/rating systems.
- AWS S3 integration.
- Stripe payment processing.
- E-receipts delivered by email upon payment.

Manufacturing Line Fault Detection

Python 3

- A computer vision project that inspects images of o-rings on a manufacturing line and determines if they have any defects.
- Uses only Python. Everything is done manually without the use of libraries such as open-cv.
- Techniques include dynamic thresholding, binary morphology, semantic segmentation and image classification.

Infection Transmission Simulator

C, Pthread library, JavaScript, terra.js, chart.js

- Uses a cellular automata approach at simulating the transmission of an infection in a population.
- Project is made up of two applications. A multithreaded C program to run these simulations and gather the data needed, and a JavaScript application that takes this data after the simulation has finished, and displays it to the user, as well as real time statistics on the simulation's population.
- Uses the pthread library for multithreading, terra.js to format and display our cellular automaton, and chart.js for real time statistics.

Theory Test Booking Tool

Vanilla JS

- Due to covid-19, theory test dates had a backlog of 6 months.
- Created a JavaScript tool that would run in the browser background and check for cancellations on the NDLS website, which were located in test centers near me.
- When a cancellation was found I was notified, which allowed me to bring my test date forward by 4 months.