Nathan Magro

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EDUCATION

University of Malta (2019 - 2021)

Master of Science in Electrical Engineering (Department of Systems, Signals and Control)

- Designed, implemented, and analyzed a novel image segmentation algorithm to separate different paint regions based on their spectral homogeneity.

MCAST (2016 - 2019)

Bachelor of Science in Electronics (Biomedical Engineering)

- Implemented object detection techniques to detect abnormal growths in the axial CT-Scan images of human lungs.
- Implemented a gyroscope algorithm to optimize control parameters to create a self-stabilizing, 5-axis dual-copter.

WORK EXPERIENCE

Front End Developer (2022 -)

Performed testing of user interfaces for projects and bug fixing.

Developed reusable and functional components as part of a toolkit library that could be used across multiple projects. Refactored and abstracted older multi-feature components into smaller single-feature components while maintaining functionality, to increase reusability and flexibility for cross-project usage.

Developed User Interfaces for projects using the developed toolkit, while calling and consuming API calls to display data and making sure that user experience is smooth and uninterrupted.

Engineer (Part Time) – Tektraco Medical (2020 - 2022)

Install medical gas pipelines and medical plants that deliver different gases used by hospitals and maintain existing systems.

Responsible for keeping medical gas pipeline installation drawings updated, to ensure that clients and technicians always have the latest medical gas pipeline drawings.

Lead the project to design and implement a paperless software system to increase the efficiency of maintenance technicians while also creating a digital platform in which clients can access their data momentarily.

SUMMARY

When faced with a challenge, I try to analyze and break down the problem into smaller steps to set practical goals and streamline the process. I am comfortable working alone, but I also enjoy working in teams. I enjoy passing my time playing computer games that, soccer, and watching TV shows to relax.

ACCOMPLISHMENTS & ACHIEVEMENTS

I presented my work and my paper, Hyperspectral Image Segmentation for Paint Analysis, at the ICIP 2021 conference.

At Sector Eleven, I refactored several functional components to increase component reusability while maintaining functionality, which drastically increased project development time as component flexibility was increased.

SKILLS

React / Javascript / Typescript / MongoDB

Front End Web Development

Image Processing

Spectral Analysis

Complex Algorithm Implementation