Dec Kolakowski

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About

I am a software developer, a TDD enthusiast and an evangelist for clean code. I have worked coding solutions for charitable causes, creating tools software for 3D and music applications and participating in technology driven games and arts projects. I graduated with a first class degree from Trinity College in Musical Composition.

Skills

JavaScript: Vanilla JS, React, Node.js, Express, Cypress, Jest, Mongoose

Databases: SQL, MongoDB, PostgreSQL

Python: Unittest, Pipenv, Flask, SQLAlchemy, Pytest

Rust: Cargo, Test, Rand

Ruby: RSpec, Capybara, Rails, Sinatra, Active Record

Testing: TDD, BDD, Spec / AAA Test Patterns

Web Development: API creation, Full stack, Single Page Web Apps, HTML, CSS

Education

Makers Academy (April 2020 to July 2020)

- Fullstack web development
- Effective remote working
- Agile methologies
- Test driven development
- Ruby, JavaScript, Python

Trinity College (September 2011 to June 2015) - First Class Honours

- Musical Composition (Orchestral & Electronic).
- Created or participated in a range of collaborative arts projects.
- Created professional recordings and integrated technology with music.

Interests

- I am a long time meditator. I have trained in the Transcendental, Vipassana and Dzogchen traditions.
- I run a collaborative music video club on discord in which a community of music video lovers come together to experience cross cultural music.
- Yoga and running.

Projects

Re-Engage Charity Organiser Portal

A fully integrated tooling environment developed for the UK registered charity Re-Engage to facilitate volunteer co-ordinators in organising events.

- Created a full stack website using MERN.
- Implemented thorough, dependency injected testing of routing and APIs with Jest and end to end testing in Cypress.
- Built a constraint solving algorithm to solve a route optimisation problem for website users.

Tech Stack: JavaScript, MERN, Google Maps API, Lodash, Genetic Algorithms, Cypress, Jest

GraphWFC.rs

A generalised graph based implementation of Maxim Gumin's Wave Function Collapse algorithm.

- Implemented an original and performant version of WFC in Rust.
- Created exhaustive functionality tests and set up benchmarking to collect data on performance.
- Used graph and set theory constructs to improve base algorithm speed and modelled the algorithm using time complexity.

Tech Stack: Rust, Cargo, Rand

Bank System

An implementation for the bank tech test kata with a focus on strong testing, good coverage and logical, clean code structuring.

- Created a well structured, SOLID solution using OO principles.
- Implemented tests (including mocks) using the standard test library.

Tech Stack: Python, Unittest, Mock, Pipenv

Experience

Proofreader (2015 - 2020)

I ran a successful proofreading and tutoring business for five years which focussed on providing high quality proofing services to overseas students and academics looking to publish work in the UK.

- Proofread for leading academics and science journals most notably the International Journal of Thermophysics.
- Frequently proofed documents in the range of 10-20 thousand words within a 24 hour turn around period.
- I ensured that over 90% of my clients made a gain of at least two grade boundaries between assignments while working with me.