

Kyle Gough

✉ Email – kylegough98@gmail.com

🐙 GitHub – github.com/KyleGough

📁 Portfolio – kylegough.co.uk

Results-driven front-end software engineer with over a decade of programming experience and over 4 years in industry. Experience working in fast-paced fintech and edtech environments, with a strong portfolio of self-motivated projects and web applications developed from the ground up.

Experience

Ripjar, Front-end Engineer

Apr 2023 – Present

- Trusted to own and drive the full software development cycle including definition, testing, release management, and representing the team by demoing to stakeholders.
- Led high-impact headline features, collaborating with product and design teams to maximise quality, user experience, and business alignment.
- Expanded capabilities of the platform to screen vessels and aircraft enabling customers to manage risk and ensure compliance with economic sanction regulations.
- Architected and drove initiative to improve developer tooling, securing stakeholder buy-in to enable development and QA teams to seamlessly manage product configuration.
- Key technologies used: TypeScript, React, Sass, Jest, and MongoDB.

Atom Learning, Front-end Engineer

Jul 2022 – Jan 2023

- Responsible for full life cycle delivery of high-impact client facing features. Strong communication and teamwork were required to refine requirements and designs with project managers and designers. Leadership was required to ensure the successful delivery of features to a consistent high quality, within time constraints.
- Built a new interface for parents to track the attainment level of their child, which received positive feedback from customers, particularly for visual appeal and ease of use.
- Performed an audit of the existing UI to identify and resolve styling issues and usability bugs, leading to a demonstrable improvement in end user experience. Decreased number of users encountering errors by 25% using Sentry.
- Demonstrated a self-motivated, proactive and creative approach. Identified opportunities to add value through projects beyond my role. Introduced animations, a brand new feature that received positive user feedback and launched a GitHub/Slack bot which was praised for significantly improving the developer experience across the engineering team.
- Key technologies used: TypeScript, React, CSS-in-JS, and Jest.

Bank of America, Technology Analyst

Aug 2020 – Jun 2022

- Full-stack developer and key contact for multiple business-critical regulatory applications.
- Rapid response problem solving to ensure minimal application down-time. Strong leadership, communication, and problem solving skills were necessary to liaise with end users (traders), identify issues, and coordinate a response rapidly.
- Hosted SCRUM calls and mentored junior developers within a globally distributed, agile team.
- Designed and launched a configurable dashboard for credit traders which empowered end users with interactive data visualisations to support better trading decisions. The proof of concept was approved and successfully brought into production.
- Key technologies used: React, JavaScript, and Python.

Skills

Programming Languages: TypeScript, JavaScript, Python, C#, C++, Java, PHP, VB.net, Ruby, MATLAB, Haskell.

Web Technologies: React, Next.js, Node.js, HTML, CSS, Sass, Tailwind, Jest, Three.js, Vercel, Webix, Materialize.

Other: SEO, Git, Scrum, Agile, Linux, MongoDB, JIRA, Bash, Zsh, SQL, GitHub Actions, Markdown, LaTeX.

Projects

Personal Portfolio Website, kylegough.co.uk

- Developed and actively maintained a personal portfolio website for over 8 years, showcasing technical skills and personal projects. Engineered overhauls including migration from PHP to React, improving site performance, SEO, and maintainability.
- TypeScript, React, Next.js, Tailwind, Jest, Cypress, GitHub Actions, Vercel, Cloudflare.

Interactive Solar System Model, kylegough.github.io/solar-system

- Immersive and interactive 3D visualisation of the solar system built with Three.js. Enables exploration of planetary orbits and significant waypoints (e.g. Mars rover landing sites).

AI Space Telescope, ai-space-telescope.com

- Curated image gallery of AI-generated astronomy such as black holes and nebulae.

Logical Sudoku Solver

- Solves expert level Sudoku using only logical techniques (no brute forcing or backtracking) whilst providing a detailed guide through each solution with insightful analytics.

Using Swarm AI to Map a Cave Network

- Generates realistic caves using a pipeline of Perlin noise, cellular automata, and flood-fill algorithms and then simulates the exploration of a communicating group of flying drones.

Graph Algorithm Visualiser, kylegough.github.io/graph-algorithm-visualiser

- Web app for visualising graph algorithms, providing real-time educational visualisations of graph traversal, node and edge interactions, and algorithmic behaviour (e.g. Prim's Kruskal's, Hamiltonian paths, convex hulls).

Education

University of Warwick, MEng, 1st

2016 - 2020

- Master of Engineering (with Honours) in Computer Science, First Class

Maidstone Grammar School

2009 - 2016

- A Level - A* in Maths, A in Further Maths, Computing, and Physics
- FSMQ - A in Additional Mathematics

Interests

Cycling, Guitar, Physics - Quantum Mechanics, Cosmology.