RAJ MOHAMMAD

Portfolio | GitHub | rajmoham10@gmail.com

EXPERIENCE

Software Developer / Powertrain Engineer – Jaguar Land Rover
- Created an automation program activated through email triggers, used ExpressJS, ReactJS and Power Automate to reduce administrative tasks by 45%
- Constructed LIN bus communication between Arduinos using C++ to simulate module communication within vehicles
- Assisting in current car resolution within Powertrain department

Solutions Engineer Intern – Coveo
- Built custom product demos for prolific clients such as Porsche using React, TypeScript
- Utilised Coveo ML to power relevance searching capabilities, query suggestions, facet management, pagination, and recommendations each tailored to client requirements
- Redesigned and refactored demo environment, cutting down development to production transition time to less than 20% of original time.

NFT Marketplace Internship Project – Frontend Simplified   [Link]   [GitHub]
- Transformed a static page into an interactive UI, processing API requests to dynamically fetch data, skeleton loading states, pagination, dynamic routing, as well as utilising Git version control to simulate a virtual, collaborative environment.

Frontend Development Ambassador
- Supported a community of 1,000+ students learning HTML, CSS, Flexbox, JavaScript, and React best practices.
- Simplifying difficult programming frontend concepts for new learners such as responsiveness, CSS Layout, Promises, Async function, API requests

PROGRAMMING PROJECTS

FakeStore (E-Commerce Site) – React.JS, HTML, CSS, JavaScript   [Link]   [GitHub]
- Developed an extensive E-Commerce site using React with responsive and interactive design for landing page, browse page, product page and basket page
- Used local JSON file to mimic API data fetching

Song Downloader (Terminal Application) – Python (+ pytube)   [GitHub]
- Built a terminal application to extract user playlist data and downloads songs locally
- Utilises Spotify API with OAuth 2 authentication and YouTube API

King's Certificate: Improving the Online Shopping User Experience (UX) – HTML, Bootstrap, C#   [GitHub]
- Developed an impression online shopping service using ASP.NET in a collaborative environment based on client requirements.
- Implemented frontend development, pagination, and dynamic navigation
- Incorporated concepts on user psychology, customer centricity, and responsive design from prior research on the project

National University of Singapore High-School: Hackathon 2020 (U-Receipts) – HTML, Bootstrap/CSS, C#, SQL   [GitHub]
- Led and developed a receipts-storing web application using ASP.NET and database storing in SQL
- Implemented frontend design for landing page, dashboard, and information display pages and assisted in backend development
- Worked under 24-hour time restriction and in a collaborative setting

EPQ: Designing and Making the 'Perfect' Game – C#, Unity, Amazon Web Services (AWS)
- Constructed and documented the development of a prototype first-person shooter using Unity and C#
- Established integrated multiplayer functionality using a client-server architecture hosted on Linux server
- Implemented popular first-person mechanics including wall-running, mantling and parkour stunting

EDUCATION

King's College London | Undergraduate   **(September 2022 - Present)**
- Bachelor of Science (Hons) in Computer Science

Imperial College London | Software Engineering Bootcamp   **(September 2022 – January 2023)**
- Python, Django, MySQL, Software Engineering Lifecycle

King's College London Mathematics School | A-Levels   **(September 2020 – August 2022)**
- Mathematics – A*, Further Mathematics – A*, Physics – A*, EPQ – A, AS Computer Science – A
- NUSH Hackathon – 2nd, British Informatics Olympiad, Senior Maths Challenge – GOLD, Senior Kangaroo Maths Challenge, King's Certificate – Distinction, BPho Senior Physics Challenge, Bebras Computing Challenge

SKILLS

Technical Skills: React, Python, C++, Next.js, NodeJS, TypeScript/JavaScript, Java, MySQL
Soft Skills: Communication, Problem-Solving, Analytical skills, Attention to Detail, Adaptability

CERTIFICATIONS

- Coveo Level Up – Platform Developer, Commerce Core Developer

References available upon request