

Siddharth Joshi

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Versatile, full-stack software developer with a passion for crafting innovative solutions across diverse industries, including Environmental, Automotive, Audio/Video Streaming, Fitness and Health, and Medical.

Specializing in cross-platform mobile and web application development; I excel in writing clean, modular, and maintainable code.

Through collaborative industry partnerships, and across 10 projects, I have utilized my adaptive mindset and teamwork to drive successful outcomes, employing effective communication and agile problem-solving.

KEY SKILLS

- Proficient in cross-platform mobile development, with a focus on Flutter for building clean and maintainable applications.
- Strong understanding of web development technologies, including frameworks like Angular.js and backend development using Node.js and C#, to build dynamic web applications.
- Experienced in integrating third-party services and APIs to enhance application functionality and user experience.
- Adept at collaborating and coordinating with team members and stakeholders to drive project success.
- Effective communicator with the ability to convey technical concepts to both technical and non-technical audiences.
- Demonstrated ability to thrive in dynamic startup environments, consistently achieving exceptional results amidst tight deadlines and high-pressure situations.
- Committed to continuous learning and staying up to date with the latest development technologies and best practices, through refining programming skills and seeking constructive feedback from mentors.

RELEVANT EXPERIENCE

Software Engineer

May 2023 - Present

TWYN LTD, London

- Consistently demonstrating strong teamwork skills and a proactive approach to learning new technologies in a collaborative team environment.
- Promptly familiarised myself with the company's tech stack within my first week to efficiently contribute to ticket resolutions from week two.
- Developing clean and well-structured Flutter code with an emphasis on unit testing using Mockito, ensuring the reliability and maintainability of the application.
- Leveraged Azure Media Services to seamlessly integrate video serving capabilities into a Flutter application, enhancing user experience and engagement.
- Successfully deployed a Next.js website to production on Azure App Service, showcasing proficiency in both frontend development and cloud deployment.
- Implemented a node.js function app in Azure Function App, collaborating closely with Azure services for efficient setup and deployment.
- Designed and implemented API endpoints on a backend-for-frontend framework written in C#, facilitating smooth communication between frontend and backend systems.

Director/Chief Executive Officer

Nov 2021 - Jan 2023

Vergroot Development LTD, Birmingham

- Established and led Vergroot; a thriving tech agency providing mobile app development, machine learning, and web development services to over 10 SMEs. Involved regular discussions with clients and team members to gather requirements and ensure timely, high-quality project deliveries. Key projects and collaborations included:
- **Key phrase Extraction Project – Python**
 - Developed a proprietary key phrase extraction solution using Python and open-source phrase extraction algorithms assisting over 50 companies to increase file organisation efficiency by 75%.
 - Procured Python packages with non-GPL licenses, strategically favouring those under Apache or BSD licenses. This approach streamlined development cycles, ensuring efficient implementation of desired functionalities while maintaining compliance with licensing requirements.

- Spearheaded the implementation of multithreading in Python to batch process documents, reducing program time by over 50%.
- Engineered a Python file parser leveraging system libraries to ingest, OCR, cleanse, and tokenize text files, consolidating logic and accelerating development cycles.
- Researched and implemented novel key phrase extraction algorithms using Python with packages such as networkx in order to meet the clients' requirements of 10 unique key phrase extraction algorithms.
- Created an executable PowerShell script to automate the installation of dependencies, folder structures, and the Python program on Windows systems, significantly simplifying installation and expanding user accessibility.
- **Django Agency Collaboration**
 - Implemented interactive graph functionality by seamlessly integrating React.js, Django, and PostgreSQL, enhancing data visualization capabilities for the internal engineering team and facilitating deeper insights into project analytics.

Angular Developer Civico, Birmingham

Dec 2021 - Dec 2022

- Utilized WebRTC for conferencing functionality and implemented web sockets to enable real-time data exchange among client-side application instances.
- Implemented advanced audio ducking functionality for multiple participants. Engineered seamless volume reduction algorithms to ensure clear communication by automatically adjusting background audio levels when participants speak, enhancing overall user experience and facilitating effective communication in collaborative environments.
- Employed systematic debugging techniques to identify root causes and implement effective solutions, ensuring optimal system performance and reducing overall system bugs by 40%.
- Minimized video and audio latency by evaluating and contrasting various video and audio compression formats for delivery across multiple platforms. Conducted comprehensive analysis to identify optimal compression methods, enhancing overall video streaming efficiency and facilitating seamless communication experiences for users across all platforms.

BCU Software House

Senior Full Stack Software Developer

Apr 2020 - Jul 2022

- Facilitated the development of 5+ client projects using a range of technologies including JavaScript, Typescript, Flutter, WordPress, and Node.js.
- Acted as a primary point of contact for clients, gathering requirements, providing technical advice, and managing expectations. Key projects include:
- **DFMA**
 - Collaborated with the Tech Lead to provide support in the development of a full-stack application, which featured a React.js frontend and Java Spring Boot backend. The project aimed at testing the hypothesis of utilizing an ontology-based database in comparison to a relational database.
 - Integrated Google Maps functionality into the application, allowing users to input addresses with postcodes, perform address lookups, and calculate distances between two inputted addresses.
 - Implemented a tree view feature to display data retrieved from backend endpoints, enhancing the user experience and data visualization capabilities of the application.
- **Drug Allergy**
 - Spearheaded the development of a mobile application in Flutter, collaborating closely with an NHS doctor to address critical healthcare needs.
 - Applied algorithmic expertise to implement a novel drug allergy diagnosis algorithm in Dart, based on client guidance and research from academic literature.
 - Designed and implemented a questionnaire feature within the app, allowing users to input ten multiple-choice answers and receive personalized drug allergy diagnosis outcomes.
 - Employed Firebase Analytics to track user engagement and behaviour, leveraging insights to optimize the application's performance and usability.

Software Developer
Pinewood Technologies, Birmingham

Aug 2020 - Aug 2021

- Acquired proficiency in the C# programming language through hands-on experience and mentorship. This resulted in the development of a fully functional to-do list application, using Xamarin Forms, demonstrating competence in mobile app development.
- Demonstrated adeptness in Xamarin Forms development utilizing the MVVM (Model-View-View Model) design pattern, ensuring clean separation of concerns and maintainability in mobile app architecture.
- Spearheaded the implementation of a feature to remove backgrounds from images utilizing a background remover REST API, showcasing problem-solving skills and innovation in integrating external services within mobile applications.

Full stack Flutter Developer
Energym, Birmingham

Jul 2019 - May 2020

- Collaborated closely with the CEO to gather requirements, prioritize features, and deliver high-quality releases on schedule.
- Developed custom code for ESP32 microcontrollers to enable communication between exercise bike chips and Firebase Realtime Database, facilitating real-time data exchange and analysis.
- Collaborated with the Mech-Eng team to implement custom build backend to accept personalised data from each gym machine.

EDUCATION

Bachelor of Science (B.S.) - Computer Science
Birmingham City University, Birmingham
First Class Overall

Sep 2018 - Jun 2022

Graduated with a first-class degree in BSc Computer Science. Throughout my studies, I have gained a strong foundation in computer science principles and technologies, including programming languages, data structures, algorithms, and software engineering. I have also developed skills in problem-solving, critical thinking, and communication, which have allowed me to excel in both individual and team-based projects. I believe that my hard work and dedication have prepared me for a successful career in computer science.