FURKAN ÜZÜM
SOFTWARE DEVELOPER

furkan.uzum@outlook.com   LinkedIn   GitHub   +90 561 618 92 10   Ankara, Turkey

Summary

I have more than 2 years of experience in software development. I am a versatile problem solver with a passion for technology. As a technical researcher, I dive deep into complex issues, leveraging innovative solutions to overcome challenges. Beyond technical endeavors, I am an avid learner, continuously exploring new technologies and refining my skills to tackle future challenges effectively.

Skills

C++, C, JavaScript, HTML, CSS, Node.js, Qt Framework, WebAssembly, TCP, UDP, Websocket, RTP/RTSP, CGI, RESTful, Git, Vue.js, Docker, Bash Script, Linux, CMake

Experience

Sparse Technology Partnership with ASELSAN   April 2022 - Present

- Utilizing WebAssembly and FFmpeg technologies, I developed a browser-independent video/audio decoder. The project aims to deliver high-resolution live streams to users with low latency, adjustable frame rates, and bitrates. Through FFmpeg support, I implemented additional functionalities such as video rewind, cropping, snapshot capture, and live stream recording. Additionally, the system supports various image filtering, SEI, and metadata parsing features. With these advanced features, our browser-independent video/audio decoder offers unparalleled versatility and performance, making it an essential tool for delivering high-quality live streams with customizable options and seamless functionality.
- To ensure secure data transmission within the system, custom Self-Signed Certificates are required to be generated and managed efficiently. Utilizing OpenSSL, I developed a solution to create and manage custom Self-Signed Certificates tailored to different transmission scenarios, such as HTTPS or FTP. Through the implementation of a user-friendly interface, the system now empowers users to upload public and private keys, enabling seamless assignment of certificates to various functions. This enhancement ensures robust security measures for data transmission, enhancing the overall integrity and reliability of the system.
- The need to establish seamless interaction between a camera system and web servers or other programs using the Common Gateway Interface (CGI) standard arose to enhance system functionality and data exchange capabilities. Utilizing the CGI standard, I undertook the task of enabling smooth interaction between the camera system and external entities, while also implementing a dynamic structure to streamline the management of embedded systems. This involved creating new interactions and optimizing data transfer between CGI and web interfaces. Through meticulous implementation and error handling, the system now boasts enhanced interoperability and flexibility, allowing for effortless communication between the camera system and various external entities. This advancement not only improves overall system management but also ensures robust error handling, even in scenarios where CGI's native support may be limited or basic.
- I developed, optimized, and tested IP camera web interfaces using JavaScript, HTML, and CSS.

Personal Projects

- ExplorePlace is a platform utilizing the Google Maps JavaScript API, enabling users to explore and share experiences within a designated region. Users can navigate venues by country, province, and district, apply sorting filters, and add personal notes and ratings. Detailed reviews and AI suggestions enhance the user experience, while the homepage offers weather updates, venue highlights, and discounts.
- WeatherWise is a web app using the OpenWeatherMap API to provide city-specific weather information. Users input city names to retrieve data such as temperature, humidity, and wind speed, visually presented with icons. Background images change according to weather conditions for a more immersive experience.

Education

- B.Sc. Electrical and Electronics Engineering, Erciyes University, Kayseri/Turkiye.   2017 – 2021

Certifications and Courses

- C & System Programers Association – C Programming Language Course Certificate   10/2020 - 06/2021

Awards

- Yeni Nesil Gelecek Project "Akıllı Teknolojiler IoT Hackathon'u" Competition- 1st Place

Languages

- Native Turkish
- Professional Working Proficiency English