CHAM ZHAO SI

Software Programmer

CONTACT

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- Taman Paramount, Petaling Jaya

EDUCATION

Pusat Latihan Excel

Diploma in Accounting and Business 2014 - 2017

New Era University College

Bachelor of Computer Science (Hons) in Software Engineering

• CGPA 3.92 2022 - Present

Diploma in Computer Science

• CGPA 3.94 2020 - 2022

SKILLS

- HTML
- CSS
- Javascript
- PHP
- Python
- GIT
- MySQLLinux (Debian)

• Flask

• Angular

• Django

• Proxmox

LANGUAGE



PROFILE

As a recent Software Engineering graduate, I am deeply passionate about developing efficient and scalable software solutions. With a robust foundation in Python, JavaScript, and web development frameworks including Flask, Angular, and Django, I have honed my skills through internships and parttime work. I am now seeking a Junior Software Engineer position to apply my technical expertise and collaborative spirit to impactful projects within the IT industry.

WORK EXPERIENCE

Tigaky Sdn Bhd (in cooperation with MACO)

Junior Programmer

June 2022 - Present

Network Map

- Developed an IP allocation map frontend using Python's Flask and SQLite, enhancing network visualization and management.
- Applied significant effort in integrating commands (tcpdump, nmap and ping) identified by my supervisor to collect detailed IP address information, including hostnames and MAC addresses.

Ticketing System

- Developed a ticketing system frontend using PHP and MySQL, complemented by a simple mobile app in Java, to replace the traditional payment gateway.
- Focused efforts on anticipating all possible errors, mistakes, and accidents that could occur when users make payments via the DuitNow QR code.

Real-Time Streaming Protocol (RTSP)

- Developed a Python and GStreamer-based video streaming solution for RTSP, enabling integration with various CCTV brands in a unified viewer.
- Devoted considerable effort to integrating libraries such as OpenCV and GStreamer into a program designed to stream various cropped frames.



Batch Management

- Implemented a PHP/MySQL system for batch user management, streamlining additions and deletions at scale.
- Exerted significant effort in interacting with the iRedMail database to create and delete batch users listed in an Excel spreadsheet.

Medical Awareness Camp Outreach (MACO)

Computer Refurbishment Technician

June 2022 - Present

Multiseat Development

- Researched and deployed a multiseat computing (1 PC for 2 Users) solution using Ubuntu OS, enabling one PC to serve two users, thus maintaining user capacity while reducing the number of PCs required.
- Developed a Bash script to manually or randomly pass through the graphics card and USB ports.

Computer Refurbished

- Refurbished donated PCs, laptops, and other accessories, then donated them to schools in need.
- Ensured that all accessories and stock were sufficient to meet the requirements of each week's scheduled plans.

FINAL YEAR PROJECT

Arduino Surveillance Remote Car

- This Arduino device supports peer-to-peer real-time streaming for face recognition and body detection, and remote control functionality, and includes hooks and trays to physically carry additional peripheral detection equipment.
- This project presented significant challenges, involving many techniques and aspects of Arduino knowledge that were new to me. I successfully mastered and integrated these techniques into a program over a seven-month period.
- This project incorporated a variety of techniques, software, and tools in its development:
 - WebRTC: Implemented to establish peer-to-peer real-time streaming.
 - **MQTT**: Handled sending and receiving control commands.
 - Angular Framework: Developed the client-side user interface.
 - Django RESTful API: Managed data manipulation.
 - **CVZONE**: Used for detecting the human body.
 - FACE Recognition: Implemented for facial recognition tasks.
 - **UltiMaker Cura**: Adjusted the size, density, and scale of 3D models.
 - Fritzing: Sketched the wiring prototype.
 - **360 Fusion**: Used to draw a 3D modeling prototype and for 3D printing.
- The most challenging aspect was implementing peer-to-peer streaming using WebRTC. This required not only understanding the coding but also grasping the architecture, as well as real-time processing of each frame with OpenCV to send back to users.