Hussam Alhassan

Computer engineering graduate seeking to work in the field of software development. Interested in low-level programming and embedded systems. A strong believer in free software and programming as an art form.

Sutton, London hsm.link@proton.me https://husmus.dev/
hussam-alhassan husmus00

Education

Altinbas University

BSc, Computer Engineering
3.47 / 4.00 GPA
Mar 2020 - Oct 2023

Topics covered include computer architecture, microprocessors, software engineering, agile development, programming language theory, data structures, operating systems, assembly programming, application development, web technologies

https://international.altinbas.edu.tr/en/

Projects

Mano Machine RISC Emulator

A RISC CPU emulator built in C#

An emulator for the Mano Machine RISC CPU, programmed in C# (.NET Core). Developed due to the lack of a modern easy-to-use emulator for the Mano CPU for use during a microarchitecture university course.

C#, .NET Core, ISA, Computer Architecture

https://github.com/husmus00/mano-machine-csharp

Mano Web App

Blazor implementation of my Mano emulator

A web app port of my Mano Machine emulator. Uses the Blazor framework and WebAssembly to run the app locally in a browser. Available at husmus.dev/mano-web and provides easier access to the emulator than the desktop app.

C#, Blazor, WebAssembly, HTML/CSS

https://github.com/husmus00/mano-web

Peach OS

Simple x86 multitasking kernel

A simple multitasking kernel built in no-lib C. Can boot into a console interface on bare metal. Contains a keyboard driver and FAT16 capabilities.

C, Cross-Compilation, Kernel, x86

https://github.com/husmus00/peach-os

Skills

Programming

C, C#, .NET, Rust, Python, Agile Development

Soft Skills

Communication, Research, Problem Solving, Teamwork

Tools

Git, Linux, VS Code, Visual Studio, JetBrains IDEs

Training & Certifications

Developing a Multithreaded Kernel From Scratch

Udemy - 2023

A course covering the development of a functional multitasking kernel in C from scratch with no standard library.

https://www.udemy.com/certificate/UC-ec282e58-3ca2-4ee7-8b60-d5d0ee503616/

Creating A Chip-8 Emulator In C

Udemy - 2023

A course covering the development of an emulator for a retro arcade machine in C with an interface in OpenGL.

https://www.udemy.com/certificate/UC-f307526d-7462-47c0-95e3-80b4be937291/

Languages

English

Native / IELTS 8.5

Arabic

Native

Japanese

Lower-Intermediate