Hamid Najafi

Product Manager, Embedded System Specialist

ABOUT ME

Experienced Hardware Developer with a demonstrated history of working in the Healthcare and Cleanroom industry.

Skilled in PCB Designing, Microcontrollers, Electrical CAD, Electrical Panels, Design Review alongside Linux System Administration, DevOps and Networking.

This CV summarizes my seven years of practical experience in software, hardware, and IoT solutions for academic and commercial applications. For more information, please visit my personal website.

If you are looking for a dedicated Embedded System Developer with a great technical background, exceptional problem-solving skills and a collaborative mindset, please don't hesitate to connect with me

WORK EXPERIENCE

Embedded System Design Specialist

Feb 2021 - Present

C1Tech Group

- Lead in the design, development, and implementation of the Operating Room and Cleanroom electrical systems.
- Manager of multiple teams at various places across the country

Hardware Development Manager

Jun 2019 - Present

FUMP-ICT

- Shareholder and Vice Chairman
- Affiliated with Ferdowsi University of Mashhad Pishgaman Holding
- PCB Design, DC Circuit Design, Firmware Development (C/C++), Embedded Linux and Troubleshooting

Product Manager & DevOps Engineer

Apr 2020 - Feb 2021

Department of Education (Khorasan Razavi, Iran)

• Linux System Administrator, Monitoring (SRE), C# (ASP.Net)

Teaching Assistant

Sep 2017 - May 2020

Ferdowsi University of Mashhad

Assistant of Computer Foundation and Programming (Dr.Asadi), Computer Networking (Dr.Mohajerzadeh), Network Security (Dr.Ghaemi), and Wireless Networks (Dr.Hosseini)

Lecturer of Internet of Things Basics Course (with Dr.Sedaghat)

- Designing projects and assignments for students
- Providing support for helping students in their issues
- Scoring and marking assignments

Internship - Network Technician

Jun 2018 - Aug 2018

HiWeb (Vodafone Iran Partner)

- 3G/4G network driver test using TEMS™ Network Testing Portfolio
- Network monitoring using Zabbix
- Several tasks of passive network engineer
- Worked with Mikrotik RouterOS

EDUCATIONAL EXPERIENCE

Embedded System Developer - Development of Cryptocurrency Jan 2020 - Dec 2020 Mining Rig Energy Monitoring System

FUM IP-PBX Lab

Software Programming: C# (ASP.Net Core API Based) with PostgreSQL Database Board Design: 2-Layer PCB Board Specs: ESP32 Core, Current & Voltage Measurement, ADC, AC to DC, RTC, EEPROM, Relay Based on: Blynk IoT Platform (On-premises)



Educations

- Master of Science, 2021-2023
 IAUM, Computer Networks
 Master's thesis: Design & Evaluation of a Tightly Coupled UWB/INS/GIS Indoor Positioning System Applying Machine Learning Methods in CloudIoT.
 GPA: 19.50/20
- Bachelor of Science, 2015-2020
 FUM, Computer System Architecture
 Bachelor project: Development of
 Cryptocurrency Mining Rig Energy
 Monitoring System.
 Major GPA: 18.05/20
 Overall GPA: 16.39/20
- Diploma, 2011-2015
 Allameh Tabataba'i. Mashhad
 Mathematics and Physics
 GPA: 19.76/20

Certifications

- Building Automation using KNX Protocol -Feb 2018 from "Iran Technical & Vocational Training"
- PCB Designing Dec 2017 from "College of Ferdowsi University of Mashhad"
- GNU/Linux Foundation Apr 2017 from "FUM LUG Association"

Key Skills

- Excellent leadership, communication and time management abilities
- Strong cooperation and partnership skills in job environment
- Outstanding planning and multi-tasking abilities
- Proven ability to work creatively along with problem-solving skills
- Talented to acquire new skills and develop team members
- Adaptable, diligent and capable of working autonomously when necessary
- Remarkable to make choices in difficult situations

Embedded System Developer - Operating Room UVC Disinfection System

FUM Robotics Lab

Embedded Board: NodeMcu, UVC Lamps Power Circuit, AC to DC Converter Based on: Blynk IoT Platform (On-premises)

Designing and Optimizing of Campus LoRaWAN & Wi-Fi Networks

Jun 2019 - Feb 2020

Aug 2019 - Aug 2019

Jun 2017 - Jul 2019

Oct 2018 - Feb 2019

May 2020 - Apr 2020

Expert in Linux and Embedded Linux

Operating Systems

Skills

Programming Languages

C/C++, C#, and Bash Scripting (Most experienced)

Printed Circuit Board

Experienced in Altium Designer Expert in PCB assembly (SMD & DIP)

Microcontroller and SoC

Experienced in ESP32 and STM32 and also NVIDIA Jetson, Raspberry Pi, and Beagle Bone

DevOps and SRE

Experienced in Git, CI/CD, Containers and Orchestration, Automation tools, Metrics, Tracing, and Logging Systems

Networking

Experienced in computer network and security IEEE Wi-Fi, Bluetooth, Zigbee, and LoRaWAN

Web Developer

Familiar with ASP.Net with HTML, CSS, JS background

FUM Information & Communication Technology Center (ICT)

• Tools: Ekahau Site Survey, GNS3, iPerf, Chirpstack

Board Design: 2-Layer PCB

• Board Specs: ESP32 Core, RN2483, RFM95

Executive Committee of the 16th International ISC

Ferdowsi University of Mashhad

 Information Security and Cryptology Conference Speaker at Information Security and Cryptology Village

Lead Project Manager - IoT Hotel Managment System

Ashian Startup - Co-Founder

System Administrator: Windows Server-based, QGIS

Software Programming: ASP.Net Framework and Razor pages with Microsoft SQL Server Boards Specs: 2-Layer PCB with STM32L, Zigbee mesh, audio, touch-key, ultra-low power design

Embedded System Developer - IoT Gateway

Jan 2019 - May 2019

FUM IoT Lab

• Software Programming: C# (ASP.Net Core API Based)

• Database: Microsoft SQL Server

• Board Design: 2-Layer PCB

• Board Specs: STM32F7 Core, RTC, SD Card, USB, 2G, LoRa, Zigbee, Ethernet, Wi-Fi, CAN, nRF (C++)

Embedded System Developer - IoT Call and SMS module

IoT based Call and SMS module

• Embedded Boards: STM32F4 Discovery, NodeMcu, SIM800 (C++)

Software Programming: HTML, CSS, JavaScript

Application Developer - Monitoring of Burnt Chandelier Lights Jan 2016 - May 2017 FUM Pattern Recognition Lab

• Device: Samsung Gear S3

• Platform: Tizen (C++)

Tehran 25/03/2023

