# Seyed Jalal Hosseini

### PERSONAL DATA

PLACE AND DATE OF BIRTH: Tehran, Iran | 1st March 1987

> Via D'Azeglio 23, 40123, Bologna, Italy ADDRESS:

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GITHUB: artronics

### **EDUCATION**

**MARCH 2016** M.Sc in Telecommunication Engineering, University of Bologna, Bologna

Thesis: "Software-Defined Wireless Sensor Networks"

Advisor: Prof. Chiara Burrati | GPA: 100/110

**FALL 2010** B.Sc in Telecommunication and Electronics Engineering, University of Zan-

jan, Zanjan

Thesis: "Controlling Robotic Arm with Human's arm motion"

#### WORK EXPERIENCE

2011

2011

2012 Technical Consultant at Shahid Rajaee Port Complex

Technical Consultant Engineer in Telecommunication and Electronic Equipment Of-

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· Consulting on supplying equipments and spare parts

• Equipment maintenance, consultant and inspector

Technical Consultant at Shahid Rajaee Port Complex 2012

Technical Consultant Engineer in Telecommunication and Electronic Equipment Of-

· Consulting on supplying equipments and spare parts

• Equipment maintenance, consultant and inspector

### TECHNICAL SKILLS

Languages:

Programming JAVA, C++, C, C#, Assembly (ARM), PHP, Javascript, HTML, CSS

- Full-Stack Developer with high expertise in backend technologies
- Complete knowledge of Object Oriented Programming and Design Patterns
- Understanding of Unit Testing, Source Control and Documentation
- Familiar with Relational Database, MySQL, SQL Server and ORM frameworks

Operating Systems:

Windows, Max OSx, Linux, Embedded OS and RTOS:  $\mu$ C/OS, freeRTOS

- · Skilled in Linux Command Line and Bash scripting
- Virtualization: Vagrant, VMWare, qemu
- Source Control Management: git
- · Server Administration: apache, nginx, mysql

· Understanding of signals, filesystems, and system calls

## Embedded Systems:

ARM, AVR, PIC, Single Board Computers

- 8-bit Microcontroller AVR megaAVR and XMEGA, PIC PIC12 and PIC16
- 32-bit Microcontroller ARM ARMv6-M, ARMv7-M, skilled in Assembly language
- $\bullet \ \, \text{Software solution based on Linux Distribution on SBCs, experience in } \textbf{raspberry pi, Beagle Bone,} \\$

mini2440

### Simulation and CAD:

Altium Designer, Proteus, Vivado, OrCAD, Modelsim, VHDL

- End-to-end Embedded Systems design from PCB to Test and Verification
- $\bullet$  Skilled in Multilayer PCB design using Altium Designer
- Advance Microcontroller simulation with Proteus
- Familiar with FPGA design process: VHDL, Vivado, Xilinx Spartan-6

### **PROJECTS**

Title Software-Defined Wireless Sensor Networking (SDWSN)

Description This project brings Software-Defined Networking (SDN) concepts in to Wireless Sensor

Networks (WSNs). A Client-Server model connects each separated WSN to a centralized Centralized Controller located in Server. The Client-Server communication happens via REST APIs. A Single Page Application (SPA) written in javascript (Angularjs) is in charge

of monitoring the whole network.

• Highly modular and loosely coupled design.

• Clean and robust code; more than 200 unit tests with code coverage up to 80 percent

Title KAIVAN: Equipment Maintenance Software

Description Kaivan is a small and easy to use Computerized Maintenance Management System

(CMMS) written with Excel and VBA. I developed this software for Fidar Saze Co and it

is still in use at Asaluyeh in Oil Platforms.

• Easy to use with familiar Excel environment

A comprehensive GUI written in VBA

Title Robotic Arm Motion Controll with Human Arm

Description A Servo robotic arm which is controlled by special developed sensor attached to hu-

man arm. The embedded system utilizes an ARM Cortex-M3 board running uC/OS-II an

sophisticated control algorithms.

 $\label{eq:significance} \textbf{Significance} \quad \textbf{ .} \ \text{Real-Time task scheduler with uC/OS}$ 

### LANGUAGES

FARSI (PERSIAN): Native

ENGLISH: Fluent, | IELTS (2012) Overall:6

### INTERESTS AND ACTIVITIES

Technology, Open-Source, Programming Music, Travelling