JIN KIM

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PROFESSIONAL PROFILE

Practical experience with scripting by Python and bash shell on Linux system for 4 years. In the field of multimedia equipment, I have experienced a variety of third-party add-ons and multimedia player programs running on embedded Linux system.

Over ten years' solid working experience as a machine controller programmer in the Factory Automation field. Possess strong electrical skills along with well developed knowledge of C/C++ language. PLC programming expert, with proven problem solving skills, with Mitsubishi & Beckhoff PLC for a major project of Solar module mass production line.

Excellent communication skills working with international companies from China, Japan and German in building manufacturing systems for solar panels.

KEY SKILLS

- Embedded Linux system with C / Python
- PLC programming with ST / FBD / Ladder / SFC
- Motion control for multi-axis high speed servo motor
- HMI design using C++ / C# and Adobe Illustrator
- Handling various data structures and algorithm using C and C++
- Develop and maintain machine controller and operation software
- An enthusiastic personality with a positive and aggressive attitude; results-oriented
- Ability to manage and prioritize a time when a project had a deadline

EMPLOYMENT HISTORY

2014 - Current Embedded Linux Software developer Seebo Networks Pty Ltd, Melbourne, Australia (www.seebo.com.au)

Seebo Networks Pty Ltd is an Australian company that specializes in home entertainment consumer electronics. Seebo Networks core business is software and hardware development, specializing in Hybrid Broadcast Broadband TV (HbbTV) and Internet Protocol TV (IPTV) content distribution infrastructure. Seebo's HbbTV devices connect consumers to publicly available FREE content libraries and provide content owners with a simple-to-use platform from which they can build a professional HbbTV and IPTV content broadcast channel. All Seebo's products are conceptualized, designed and developed in Australia. The vast majority of our products are also manufactured and assembled in Australia.

Responsibilities:

- Programmed embedded linux system for streaming device with a C
- Programmed the application skin for UI with Python
- Managed the road map for software development as a team leader
- Provided technical solutions and trouble shooting to support team for end users

Achievements:

- Upgraded previous software, Seebo MAXX to Seebo HEX which has competitive features such as streaming IPTV channels provided by Seebo's server and sharing media sources within local network with SAMBA(Windows) and NFS(Linux) protocol
- Developed Seebo ECO software that turns your home into an entertainment ecosystem. With Seebo Eco you can link all the smart devices in your home wirelessly. You can share content from one device to another quickly and easily.
- Developed to combine a Seebo HEX with up to six Seebo NEO's to share all your favorite entertainment services and content to any room in your home wirelessly.

To view this device go to: http://www.seebo.com.au

2008 - 2013 PLC/C# Programmer

SolarPark-Korea, Jeon-Ju, South Korea (www.solarpark-korea.com)

SolarPark-Korea is a large company that employs over 400 operators and 50 support staff, which manufactures solar modules for the international market.

Responsibilities:

- Programmed controller for automatic equipment with a PLC
- Programmed HMI (Human Machine Interface) for operation panel software with C#
- Controlled liner motion motor for high speed devices
- Developed and maintained controller and operation software
- Provided technical solutions and trouble shooting for end users

Achievements:

Designed and developed new machine (named Interconnection Machine) which significantly reduced raw material loss and improved productivity by automating the process to make solar modules. This machine allowed a solar cell which is an electrical device that converts the energy of <u>light</u> directly into <u>electricity</u> to link up with other cells using automatic induction heating controlled by PLC. This machine and its function were both patented by the company.

To view this machine go to: http://www.solarpark-korea.com/eng/strength.asp?category=2

 Developed and designed the graphical operating application on the above Interconnection Machine which provided real-time monitoring of its status and enabled operators to change the model of solar module by the press of a button rather than manually, allowing for instant modification according to daily demand. This dramatically reduced manufacturing process cycle-time.

To see this process go to: http://www.solarpark-korea.com/eng/product.asp

Successfully supplied 23,000 solar modules to Western Power, Korea for Korea International Circuit for F1 project in 2012. This was only possible because of the invention of the previously mentioned Interconnection Machine which had improved productivity at SolarPark and thus enabled the company to provide high quality modules with 600MW capacity.

1995 - 2007 C/C++ Programmer

MG Tech Company Limited, Seoul, South Korea

MG Tech was a maker of automatic embroidery and sewing machine. In 2010, MG tech has been on the M&A of SunStar which was major company in textile industry. SunStar company has been manufacturing and exporting the embroidery machine since 2011.

Responsibilities:

- Programmed main controller (DSP) with microprocessor using C/Assembler
- Programmed operation panel software using C/C++
- Controlled PWM for high speed devices
- Managed the project (job allocation and project scheduling)
- Developed and maintained existing products
- Provided technical solutions and trouble shooting for clients

Achievements:

- Developed 3 axis motion control parts which were controlled by microprocessor (DSP) for the new embroidery machine. This device enabled the machine to operate at a higher speed and streamlined product handling for changes such as thread colour, stitching density and other design aspects without stopping the machine. This had not been possible previously. More importantly, the new device allowed the company to manufacture and sell its own brand from 2007 onwards. This was more profitable for the company as it became a manufacturing company instead of a trading company which no longer imported from Japan.
- Reprogrammed the PWM which enabled the machine to move using pre calculated pulse width modulation patterns without any out-of phase interruptions. Due to the high speed motion productivity was improved.

ACADEMIC QUALIFICATIONS

Mar 1989 - Feb 1991 Advanced Diploma of Electrical Engineering

Dong Seoul College

GyeongGi-Do, Korea

FURTHER TRAINING

Jan 2014 - Jun 2014 Certificate 3 Spoken and Written English

Holmesglen Moorabbin Campus, Victoria

Jun 2007 - Dec 2007 PLC course (Intermediate level) for LG Master-K plc

LG Industrial System Cheongju Factory, Korea

Mar 1995 - Oct 1995 C & Unix Administration

Bit Education Centre

Seoul, Korea

PROFESSIONAL ASSOCIATIONS & MEMBERSHIP

Mar 2007 Qualification of C++/C specialist

ACS www.acs.or.au

LANGUAGES

Fluent in Korean and English

ACCREDITATIONS & LICENCES

Oct 2013

Victorian Drivers' Licence

REFERENCES

Referee for training at Holmesglen

Susan Cavanagh

Coordinator, Holmesglen Research Engineer <u>Susan.covanagh@holmesglen.edu.au</u> + 61 402 420 563 Referee for working at Seebo

Yang Shao

Manager - Product R&DI

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