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| **HUANG, QI(Jerry)** | | |
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| **SUMMARY** | * Strong **Firmware** development experience in wireless industry. Proficient in **embedded C** programming and strong troubleshooting skills. Familiarity with **WLAN/Bluetooth** Technologies.   Solid understanding on real-time systems(**ThreadX**). Experience on **32-bit** Micro-Controller(**ARM**). Familiarity with equipments like **Oscilloscope and Logic Analyzer**.   * Hands-on **FPGA** experience on high-speed **ADC/DAC** control. Proficient in **RTL** design and verification(**Verilog**), FPGA Implementation(**Xilinx Virtex7**). Hands-on design experience on **SPI, I2C** Protocol. Working knowledge on SystemVerilog. * Solid understanding on Data Structure and Algorithms, Object-oriented Design. Other programming skills (**C++, Java, Shell, Perl, Python**). Familiarity with **Linux** Environment and Version Control Systems(**P4V,SVN**). * A Self-motivated individual with good inter-personal and communication skills. | |
| **WORK EXPERIENCE** | **1. Firmware Engineer**  **Marvell** **Inc**, Santa Clara**,** CA | ***07/2016 - Present*** |
|  | * Duties on various **Bluetooth** firmware troubleshooting, reported from both internal QA team and external customers. * Duties on various firmware enhancement and feature development. | |
|  | **2. Firmware Engineer**  **Tensorcom** **Inc**, Carlsbad**,** CA | ***02/2015 - 07/2016*** |
|  | * Developed two key wireless features of **WiGig(802.11ad),** including **Ratio Adaptation** and **Beamforming**. (i) Developed and verified the ratio adaptation algorithm for auto modulation control and participated in performance tuning. (ii)Developed Beam-forming firmware and trouble-shot the entire system from firmware layer down to radio layer. Worked with system and hardware teams for analysis and improvement of the overall BF performance. (iii) Provided customized firmware for both Windows and Linux applications. * Developed test firmware and verified HW Block (**Digital MAC)** on **FPGA**( **Altera)** platform before Chip tapeout, inlcuding all of **AMPDU**-related test-cases. * Provided firmware support for customer requests and various product demonstrations, including customization, integration and trouble-shooting. | |
|  | **3. FPGA Engineer, Intern**  **Sibeam, a Lattice Company,** Sunnyvale, CA | ***06/2013 - 11/2013*** |
|  | * Participated in **WiGig digital PHY** project and under limited supervision completed a new **high-speed DAC/ADC subsystem's bring-up** upon a new FPGA(**Xilinx** **Virtex7**) emulation system. * **(i)**  **RTL designs** and **FPGA implementations** for **SPI**-based **DAC** control and **I2C**-based **ADC** control, respectively. **(ii)** In-lab work on bring-ups of DAC and ADC system at **Gigahertz** **sample rate**. **(iii) High-speed self-loopback validation** between DAC and ADC systems, successfully obtaining D/A,A/D signal conversion with high quality. | |
|  | **4. Software Engineer, Intern**  **Walcott Electrical Company**, Xi’an, China | ***09/2010 - 12/2010*** |
|  | * Developed **Host Application** for a **Aircraft Gigabit-Ethernet** Data System based on **Labwindows/CVI** framework.Implemented back-end data transfer by **C** with **ModBus, UDP, TCP/IP** protocols. | |
| **EDUCATION** | **Santa Clara University,** Santa Clara, USA **GPA:3.74/4.0** ***09/2012 - 06/2014***  MS in Computer Engineering  **Northwestern Polytechnical University (NWPU),** Xi’an, China ***09/2008 - 03/2011***  MS in Electrical Engineering ***09/2003 - 07/2007***  BS in Electrical Engineering | |
| **COURSE** | **1**. VLSI Design **6**. Computer Architecture  **2**. VLSI Physical Design **7**. Operating Systems  **3**. Logic Synthesis **8**. Analysis and Design of Algorithms  **4**. SoC Verification **9**.Image and Video Compression  **5**. FPGA Design **10**.Objected-Oriented Programming | |