He Huang

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Personal Details

Chinese Name	:	黄 河
Gender	:	Male
Date of Birth	:	Aug 17. 1982
Location	:	Shanghai

Qualification Summary

- Expertise in SW system test on Linux/Android, Windows and QNX for multiple technical areas
- Expertise in CoreBSP & Security testing for mobile & automotive platform.
- Expertise in large scale test automation system design, development and operation, programming experience in C/C++, Python.
- Expertise in cloud native test system development with Docker, K8s.
- Rich in technical knowledge of SoC design/validation, ARM, Multimedia, Machine Learning and deep learning.
- Experienced people manager to provide leadership to the team
- Strong management experience in cross functional and cross region projects, certified as PMP® Project Management Professional since 2011.

Work Experience

Alibaba – 平头哥 AI 芯片
Main Role: Technical Expert
Jul 2018 ~ Now
Responsibilities:
- Setup Gerrit code review + Jenkins automation test system. Created different types of the test jobs like check-in, integration etc.
- AI chip co-sim & correlation test: co-work with DV on C-Model/RTL co-sim test before RTL freeze; also system level correlation test after chip tape-out.
- Implement test system which is used to measure accuracy and performance number for the network which running on AI chips.
- Design and implement Xuanwu 1.0 automation distributed test system platform, which is consisted of build engine, test engine and database, and it is based on K8s cluster for scalable test workload management.

Qualcomm
Main Role: Test leader/Manager
Nov 2014 ~ Jul 2018
Responsibilities:
- Leadership in Qualcomm chipset platform software validation for CoreBSP and security features on 1). Mobile chipset + Linux Android   2). Automotive + QNX Hypervisor: Drive strategic test planning, monitoring test execution, improving test efficiency with post mortem analysis.
- Leadership in Qualcomm automotive chipset's CoreBSP and security feature validation on QNX hypervisor platform.
- Technically covers testing against features like Boot, SoC Infra, Peripheral Interfaces, Storage, PMIC, TrustZone and high-level OS security.
- Drive efforts in automation system development of PMIC charging automation, USB test automation, CoreBSP BVT test suite automation and security BVT test suite development. Also drive joint automation development with 3rd party vendor - DongZhou automation solution for massive TF cards test automation.
- Leadership in China customer joint test and customer case support activities, delivering technical training to China customers - Xiaomi/VIVO etc.
- With spare bandwidth, taking secondary management and leadership role in:
  - ✓ AP Power & Thermal: DoU test plan definition, QPAT automation tools development
  - ✓ Android framework test: stability, compliance, kernel and sensors
  - ✓ UI testing for Qualcomm Global Path: Carrier requested features
  - ✓ AI NPU testing: SNPE testing in power and performance
  - ✓ AI for automation: utilize the Keras CPTN/Tensorflow Object Detection API for gaming UI text recognition for gaming logging.

Marvell
Main Role: Test leader/Manager
Feb. 2010 ~ Nov.2014
Responsibilities:

- Build-up team to satisfy project needs for Linux BSP / drivers validation on Android platform, SoC Vmin/Thermal mitigation verification and correlation, system issue analysis
- Lead team to validate Linux BSP/driver software on various platforms/releases to reach massive production quality
- Leadership in distributed automation test system development - system has capability to support hundreds of boards simultaneously
- Leadership to deliver test package release - Linux BSP/drivers Test Kit release (800+ test cases and GUI support)
- Drive test coverage development against Linux BSP/drivers in depth for all BSP features – like CAM/ISP, LCD, AUDIO, SDH, USB, POWER, Performance and Benchmark etc.
- Design SVC (Vmin) correlation test scripts which could be used to verify the voltage compensation settings work on Linux Android + DKB platform. Define the program to characterize the thermal management policy for SW results.
- Drive team's efforts in customer issue analysis and support.

Main Role: Staff Software Engineer in Test
July. 2006 ~ Feb 2010
Responsibilities:

- Responsible for platform validation for Marvell PXA series chipset on Windows Mobile/CE and Linux platform.
- Driving test execution and issue triage.
- Responsible for cross operating system test case design and development for LCD, VPU, Graphics, Audio, Power, MEVD features.
- Responsible for Windows Mobile drivers test development, Windows Mobile CETK issue analysis.
- Responsible for concurrency test design and development for the SoC system.

Intel
Main Role: Software Engineer in Test
July 2005 ~ April 2006
Responsibilities:

- Responsible for USB 2.0/OTG feature test design. USB compliance testing execution.

Main Role: Software Engineer in Test
July 2005 ~ April 2006
Responsibilities:

- Responsible for audio and video latency testing automation development in remote gaming scenarios.

Education Background

Nanjing University
Sep. 2004 – July.2006
Master Degree of Software Engineering

Chongqing University
July.2000 – June.2004
Bachelor Degree of Software Engineering

Certification & Training

- ✓ PMP - Project Management Professional
- ✓ AWS Awesome Day
- ✓ Mini MBA course
- ✓ Deep Learning Course