FAYE ZHANG

Email: zhan1518@umn.edu   Tel: 612-5161274
Address: 1512 Vista Club Circle, Apt 202, Santa Clara, CA, 95054

About me: Please click HERE for my portfolio.

PROFICIENCIES
- JavaScript/CSS3/HTML5, jQuery, Bootstrap
- Java (4 yrs Eclipse), LUA (1yr), TCL (1 yr), PowerShell (1 yr), C++ (4 yrs),
- Eclipse, Photoshop, Matlab(4 yrs), Visual Studio (4-yr), etc.

EDUCATION
UNIVERSITY OF MINNESOTA-TWIN CITIES, MSEE & BSEE   Jul, 2010 – May, 2014

EXPERIENCE
SENIOR PRODUCT AND APPLICATION ENGINEER (SAN JOSE, CA)   Jan, 2015 – Present
- **SK Hynix Memory Solution.** System Department.
- Design, develop, optimize and execute test plans and regression test cases from functional specs of enterprise SSD product.
- Work with team to implement reliability test by creating **JAVA** plugins to Neosom chamber:
    - Implement SATA and NVMe interface standard commands, SKHMS vendor unique commands and different workload loop from JAVA level based on Neosom API.
    - Support hardware and firmware failure analysis on drive level by collecting all detailed log and tracking data.
    - Test contents includes: Performance across different workload, SMART health monitor, read disturb, write read compare and other test cases added according to FW and HW debugging purpose.
    - Optimize test scripts for test automation. Complete measurement with huge efficiency improvement and high accuracy.
    - Be gate keeper of product release based on the result of reliability test of 1-day baseline, 1-week mix workload test with temperature condition changing and voltage margin, and 6-week stress RDT.
- Be responsible of data collecting and reviewing of the mass qualify of Pearl product (SATA) and provided weekly report to customer. Created **Python** and **PowerShell** automation script for data parsing and analyzing. Identifying, analyzing, and documenting any defects discovered during testing. Worked with FW or HW engineer on bugs fixing. Supported further discussion with customer through the whole product mass quality.
- Created **LUA** automation script to measure commands latency and work with FW engineer to get improvement and to meet spec requirement.
- Functional test across multi-machine:
    - Endurance validation (Ubuntu).
    - SATA digital compliance test. Implemented LeCroy digital compliance test suite.
    - POR/SPOR wakeup time measurement.

VALIDATION ENGINEER INTERN (SAN JOSE, CA)   Jan, 2014 – Oct. 2014
- **HGST, a West Digital Company.** Preamp Technology & Characterization Team. Validated multichannel front-end preamp performance and characterization on chip level and HDD level.
- Developed automation scripts using TCL with equipment controlled over Ethernet, GPIB, USB Communication;
- Created **TCL automation script with GUI** to measure chip power consumption while toning through multiple register settings. Worked with validation engineer in Fujisawa head quarter on data review.
- Created TCL automation script with GUI to measure commands latency. Script controlled LeCroy Oscilloscope to capture rising edge/falling edge and calculate average/min/max/median, which dramatically shortened test time.

SOFTWARE ENGINEER INTERN (PLYMOUTH, MN)   May, 2013 - Aug, 2013
- **Nonin Medical, Inc**. R&D department of noninvasive physiological monitoring solution.
- Worked on the development of **embedded C++** automation script to support functional validation of the accuracy of hardware prototypes for non-invasive medical devices.