

Mingjing Huang

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PROFILE

Creative and energetic awesome product architect with extensive experience in complete hardware product development cycle from design to manufacturing. Offering consulting services including hardware architecture, system and digital design for consumer electronic devices, as well as project management for hardware inclusive products. Excellent communicator and has a knack for clarifying and solving complex problems through integration of insights from disparate perspectives. Shipped products at >1 million volumes for Cisco and Apple, created prototypes for the advance development groups at Lab126 and Nokia at small quantities, and architected BLE enabled wearables. Has a strong interest in user and value focused designs, and passionately believes in creating simple, artful, and delightful products.

EXPERIENCE

Product Architect, Basis Science/Intel, San Francisco, CA

2015-2016

Product co-owner (along with ID and product management) that drove product definition and architecture through ID/UX exploration, concepting, to prototype for next generation wearable device. Technical lead for ME and EE team that built on wrist test platform for biometric sensor system. Defined project schedule, design best practices processes and issue tracking process for team of 7 engineers. Managed project requirements, resource requests, cross functional coordination, and technical aspects of management team presentations. Principal inventor or contributor for 4 filed patents and 5 invention disclosures.

Sr. Hardware Integrator, Coin Inc., San Francisco, CA

2014

Member of small EE team of 4 working on extreme z-constrained consumer product. Lead FW/HW debug efforts for sensor timing.

Sr. Hardware Engineer (contract), Synapse Product Development, San Francisco, CA

2013 (Aug-Oct), 2014(Nov)

Tech lead for AM335x ARM Cortex CPU based product slated for low volume production. Worked with small cross-functional team (ME/EE/SW/FW) to design and build 5+ alpha phase cosmetic units used in in-situ user testing.

Sr. Hardware Integrator, AEHW group, Nokia Inc., Sunnyvale, CA

2012-2013

Exploring new product and UI concepts in polished prototypes in 10-50+ quantity. Architected, designed, and built CE concept prototypes. Drove schedule and requirements for cross functional team (ME, SW, FW) and managed external consultants. Initiated cross team project and hacked Linux code to complete successful demo for CEO and board members. Principal inventor on one filed patent.

Sr. Hardware Design Engineer, Lab126/Amazon, Cupertino, CA

2010-2011

Collaborated with small team in early product feature definition through creative technology application and invention. Built multiple fast turn prototypes for proof of concept then presented to senior executives. Generated complete power analysis based on multiple user profiles. Principal inventor on 2 issued patents, 2 filed patents and contributor on 4 other filed patents.

System Integrator, Apple Inc. Cupertino, CA

2005-2008

Tech lead for iMac graphics, managing both GPU vendor and factory engineers. Worked closely with OS software, mass storage, display, EMC, audio, product design, industrial design, and operations to deliver new products within a 9-month development cycle. Designed, validated, and debugged subsystems including graphics (LVDS, TMDS, TVout, VGA), USB, Ethernet, PCIE, SATA, interconnects. Collaborated extensively with manufacturers Quanta and Foxconn on design for manufacturability, engineering build and test process and product quality. Created AppleScript based application to optimize failure reporting process at prototype builds and support fast development cycles.

Shipping products: last generation PowerPC iMacs, educational iMac and cost reduction, new iMacs release 07 and 08, iPad0.

Team Lead/Hardware Engineer, Cisco Systems, San Jose, CA

2000-2005

FW and HW design of extreme cost sensitive 8051 based SoC product including interfaces to LCD, flash, UART, key input, PWM LED. Lead cross-functional team as a system level design engineer and supported factory and customers post mass production.

Shipping products: Cisco 7971G-GE, 7970G, 7960G, 7960, 7940, 7910, and 7914 – totally 33million+ units in 10 years.

EDUCATION

California Institute of Technology, Pasadena, CA – B.S. Engineering and Applied Sciences 1999

SKILLS

Proficient with Concept HDL, Constraint Manager, Allegro, Altium, Jira, Confluence

Programming languages: C, C++, Apple Script, shell script

Fluent in Mandarin Chinese.

Poetry composition on demand. Karaoke superstar. Improv violinist. Builder of wings. Competitive meditator. Yogi. Purpose seeker.