

Shaohua Ma

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Summary

Seeking career opportunities in the software development field with leadership role.

Team player; versatile; result oriented.

Experiences

- **Sr. Solutions Architect, Software; Thermofisher Scientific; Nov 2018 – July 2019**
 - Provided direction, guidance and support in architecting and migration of more than six Thermofisher Connect (formerly Cloud) applications
 - Features: instrument monitoring and control, data collection, transportation (field to cloud), analysis, and management
 - Technologies: AWS (S3, DynamoDB, EC2; ECS, Lambda, SNS, Kinesis, etc), IoT, and other Thermofisher developed/customized services
- **Sr. Manager, Software; Thermofisher Scientific; Feb 2014 – Nov 2018**
 - Major accomplishment is the management of the development of a FDA (PMA) companion Dx software application. Key characteristics of the project include:
 - End to end involvement: customer requirements, risk analysis, product specification, design, algorithm (training), verification and validation
 - Multiple disciplines: software, instrument, assay, drug, algorithm
- **Sr. Manager, Software; Life Technologies; Apr 2011 – Feb 2014**
 - Managed the development of several qPCR instrument software offerings
 - Managed team of diverse geographic locations: US, Singapore, and China
- **Staff Engineer, Software Applied Biosystems / Life Technologies; Jul 2005 – Mar 2011**
 - Developed software framework for AB's qPCR software applications (still used today)
 - Tech lead in an EU IVD software application

- Sr. Engineer, Software Applied Biosystems; Dec 1999 – Jun 2005
 - Developed comprehensive genetics domain model for AB's software offerings
- IT Specialist; IBM Global Services; Canada; 1998 – 1999
 - Developed solutions for IBM products' internationalization directive

Skills

- Software Development Management
 - Full life cycle process: requirements; risk analysis; design; planning & scheduling; verification and validation (V&V); deployment
 - Regulations: Research use only (RUO); regulated: CE-MDR; FDA
 - Multi-disciplined: software; algorithm; instrument
 - Processes: Agile; iterative; TDD; DDD; CI/CD
 - Standards compliance: IEC 62304; 21CFR11; QSR; ISO 13485
- People Management
 - Distributed team: different regions/sites in US; overseas: Singapore; India; China
 - People building: goal setting; performance review and feedback; training
 - Team building: bug hunting; offsite activities; new tech/ideas presentations
 - Strategic planning: market trend analysis; technology review and adoption planning
- System Architecting and Design
 - Cloud; distributed (on premise); desktop
 - Modular systems; service (micro service) based systems
 - Data analysis and interpretation; Instrument/robotics monitor and control
- Application Development
 - Tools: svn/git; jira; sourceforge; maven; Jenkins; eclipse
 - Languages: java; python; R; javascript; C; C++; C#
 - Frameworks: osgi; spring framework; vue
 - Services: AWS; tomcat; RDMS; nosql; jms

Education

MS, Computer Science; Dalhousie University, NS, Canada; 1998