Pei QING

+86 186-2111-0317
hi@qingpei.me
qingpei.me
edwardtoday

Education

2011–2012 **M.Sc. in Software Technology**, *The Hong Kong Polytechnic University*, GPA:3.95/4 with Distinction.

2006–2010 **B.Eng. in Computer Science and Technology**, *Tsinghua University*, Beijing, GPA:85/100.

2007–2010 **B.S. in Economics**, *Tsinghua University*, Beijing, dual degree.

Working Experience

2015–present **Software Development Team Lead**, *Sansitech*, Shanghai.

- Work closely with peers in the business to clearly understand requirements.
- Establish annual and quarterly objectives. Guide individuals to clarify quarterly objectives.
- Oversee the technologies and tools used. Introduce better ones when necessary.
- Develop and implement standards and procedures to ensure high quality software. Passed process audits from ISO, GJB and key clients.
- Coach the team to practice version control with Git & GitLab, continuous integration with GitLab CI, and improve productivity with automated tests and deployments of mobile apps.
- Monitor and guide team members based on behavioral data in GitLab & Redmine.
- Hire talents to meet the requirements of software apps and platforms from growing business needs and expanding product line.
- Shipped key products on time during 2018 Q1 through Q3 while quits rate surges to 36%. Regular trainings and efficient configuration management helped.

2017 **Head of Product Dev Center, Head of Smart Home Dev Group**, *Sansitech*, Shanghai.

- Plan and develop new LED display products with 6 product managers and 7 functional units.
- Developed 11 LED products in 8 months, including small pixel pitch (P1.25/1.67mm) LED displays, displays for rental/fixed installation use cases, poster display and highway variable message signs.
- Design and implement Wi-Fi smart bulb and ZigBee smart home kit with a hub, bulbs, a remote control and a curtain controller. The team consists of one designer, 6 SDEs and 4 HDEs.

2013–2015 **Software Engineer**, *Sansitech*, Shanghai.

- Networking module of LED display/luminaire control system. **6X higher throughput** than previous version by asynchronous design.
- Optimized LED calibration toolkit to **30X faster** pixel searching and better perceived uniformity.

2012–2013 **Research Assistant**, *Biometrics Research Center, The Hong Kong Polytechnic University*.

Projects

2015–present **Stellar Wi-Fi Smart Home Products**, *iOS Developer → Product Manager*.

- Develop Wi-Fi smart bulb, ZigBee hub, bulb, remote control, curtain controller, etc.
- Released iOS app version 1.0 in 32 days including learning Objective-C for 2 weeks.
- Voice control available via Amazon Alexa and Google Assistant.
- Define product roadmap, backlog and test plan. Review API design and major merge requests.

2015–present **StarRiver: Smart Pole System**, *C++ Dev → Product Owner → Team Coach*.

- Developed a management platform for intelligent street lights for device control and monitoring of luminaries, LED displays, environment sensors, Wi-Fi APs, etc. System capacity was tested and rated at 20,000 devices.
- Enable low-cost customization by an architecture that decouples the application, API and datastore.
- Being compatible with Huawei agile controllers and IoT platform, StarRiver has been incorporated into Huawei Smart City solution v1.0 in Sep 2017. It is expected to pass all tests for v2.0 in Dec 2018.
- Participate in defining roadmap, designing system architecture and APIs. Lead the 15-member team to adopt and **practice the Scrum method**.

2017–2018 **Huawei Quality Systems Audit: Soft Quality**, *Head of Functional Unit*.

- Revise process documentation to clearly define the processes of requirement management, design, development, validation, deployment and change management.
- Incorporate IT tools, such as a wiki/issue tracker/GitLab merge requests, to facilitate the management of requirements, defects and changes.
- Set up rules for retrospectives and root cause analysis to reduce defect rate. Started entry-level risk analysis and maturity estimation.
- Passed Huawei QSA for Smart City BU in July 2018 and Smart Home BU in Aug 2018.

2017–2018 **A Study of a Use Case Scenario Design of Wi-Fi Smart Bulbs**, *Corporate Advisor for Innovative Practical Projects (IPP) Project*, Shanghai Jiao Tong University.

- Advise two sophomores to design innovative use cases for Sansi smart Wi-Fi bulbs.
- Revise and edit the system design, presentation materials and reports. The project passed the acceptance of the EE department and was highly evaluated.

2017–2021 (expected) **Key Technology Research and Demonstration Application of Outdoor Intelligent Lighting Gateway and Control Platform**, *Head of Project Secretary Team*, National Key R&D Program of China 2017YFB0403500.

- Assist the project leader to organize, host, and participate in relevant meetings held by the Ministry of Science and Technology and project member organizations.
- Coordinate resources in companies and organizations participating the project and departments within Sansitech to ensure that the project is implemented according to the plan.

2014 **StarRiver: Street Light Management System 1.0**, *C++*.

- Developed a street light management system with dimming, color temperature setting, operational status monitoring, error reporting. System capacity was tested and rated at 5,000 lights.
- Developed the server that handles hardware communications and database operations. The system evolves to be a smart pole system mentioned above since 2015.

2014 **Remote Monitoring System of Highway Variable Message Signs**, *C++*.

- Collect status and snapshots of highway VMS products through GPRS connection.
- Reduce the cost of on-site inspections by less manual inspections and specific maintenance advices.
- Developed the server part running on Linux. **The server application kept running since Feb 2014 with only a two-minute maintenance window in 2016 to add a new feature.**

2011–2012 **3D Palm-print Recognition**, *MATLAB*.

- Achieved a **worldwide leading 98.7%** identification accuracy using 3D palm-print features. (Accuracies found in previous literature were less than 93%.)
- 2X speedup (compared to searching sorted database) gained by utilizing 3D global feature index.

Skills

Programming Used in Working: C++, Objective-C, MATLAB, LaTeX. Used in Personal Code: Python, Java, R

Public Speaking Quarter and annual reports to the senior management and shareholders, product launch, keynotes in industry conferences (a,b,c) and training courses.

English Fluent in spoken and written English. Capable of working in an English-Speaking environment. CET-6: 652(99th percentile)