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━━━━ 教育经历

2011–2012 **软件科技专业硕士**, *香港理工大学, 香港, 学分绩:3.95/4 , 获"成绩优异"评价.*

2006–2010 **计算机科学与技术专业学士**, *清华大学, 北京, 学分绩:85/100.*

2007–2010 **经济学学士**, *清华大学, 北京, 双学位.*

━━━━ 工作经历

2015 至今 **软件研究所所长**, *上海三思电子工程有限公司.*
- 带领软件团队。负责公司产品桌面、Web、移动应用的需求分析、技术选型与项目管理。
- 确立部门年度和季度目标,帮助开发小组及个人明确季度目标。
- 制定开发流程、建立软件测试规范,代表软件团队接受 ISO、GJB 及大客户的体系审核。
- 推动团队实践 DevOps:版本控制(Git & GitLab)、持续集成(GitLab CI)并逐步提高自动化率(单元测试、少量 UI 测试、App 测试版本的自动化部署)。利用 GitLab、Redmine 的行为数据辅助考核。
- 负责团队建设,将开发团队由 8 人逐渐扩充至 39 人以满足业务发展(小间距和户外屏的需求逐步分离)和产品线扩张(新增智慧路灯、智能家居产品)对软件及云平台的需求。
- 通过长期组织部门培训(月均 2 次)和配置管理,在 2018 Q1~Q3 团队流动性高峰期(期初 38 人,期末 32 人,出 18 人,进 12 人)保障重点产品和合同软件的交付未受影响。

2017 **产品研发中心经理、智能家居组组长(兼)**, *上海三思电子工程有限公司.*
- 带领 6 位产品经理,协调 7 个专业组,承担显示屏新产品开发职责。
- 8 个月时间开发小间距全彩屏、室内外租赁/固装屏、广告机、高速双基色等 11 个产品。
- 带领 11 人团队(7 软件 +4 硬件)开发 Wi-Fi 智能球泡灯软硬件和 ZigBee 智能家居套装。

2013–2015 **软件工程师**, *上海三思电子工程有限公司.*
- 开发公司高速公路监控、照明控制、显示屏校正等通用软件。
- 独立完成 LED 显示屏、路灯控制系统的通信模块。通过异步设计,**吞吐量比旧版提升 6 倍**。
- 改进内部显示屏校正软件,从成像和视觉原理出发设计校正算法,系统实现比此前**快 30 倍**。

2012–2013 **助研**, *人体生物特征识别研究中心, 香港理工大学计算学系.*

━━━━ 项目经历

2015 至今 **智能家居产品**, *iOS 开发 → 项目经理.*
- 开发 Wi-Fi 球泡灯;ZigBee 网关、球泡灯、筒灯、遥控器、窗帘等组成的套装。
- 在项目前 14 个月里独立负责 Wi-Fi 球泡灯 iOS 客户端。32 天内做出首个可用的演示版本,其中前 13 天时间用于学习 Objective-C。
- 对接亚马逊 Alexa 和 Google Assistant 实现自然语言声控。
- 11 人项目,负责定义产品开发路线图、功能需求、测试项,搭建第一版软件框架,参与制定接口,开发评审。

2015 至今 **智慧路灯控制系统**, *C++ 开发 → Product Owner → 教练*.
- 智慧路灯控制软件。在灯控基础上，加入了屏、传感器、充电桩、无线 AP、RFID 等设备的独立功能与联动。支持 20000+ 设备。
- 通过划分 Web 应用、RESTful API、数据库、通信底层的模块化设计，提高项目定制的灵活性。
- 2017.9 完成与华为 EEM 平台对接，写入华为智慧城市胶片 1.0 版。计划 2018.12 完成第二版对接，纳入华为胶片 2.0 版进行 TR5 审核。
- 初期 7 人，目前 15 人。初期负责，后期参与定义产品开发路线图、系统架构；参与制定接口，开发评审；带团队践行 Scrum 方法，提供工具和内、外部培训支持。

2017–2018 **华为供应商软件体系审核**, *模块负责人*.
- 修订程序文件，明确定义需求管理、设计、开发、测试、发布、变更过程。
- 部门工作 IT 化，用 wiki、issue 和 merge request 做需求、缺陷和变更管理。
- 建立定期复盘的制度，找缺陷根因，通过培训及工具降低缺陷率。开展初级的项目风险评估、成熟度评价。

2017–2018 **关于 Wi-Fi 智能球泡灯应用场景设计的研究**, *大学生 IPP 项目企业导师, 上海交通大学*.
- 指导两位学生（胡炳城、林越川）基于三思智能球泡灯的开放接口进行应用课题研究。
- 对设计、实验、答辩的内容提供修订建议，通过院系验收，评价完成情况优秀。
- 上海交通大学学生创新中心企业导师（2019 年度），编号 SI2019059

2017–2021（预期） **室外照明智能网关及控制平台关键技术研究与示范应用**, *项目秘书组组长, 国家"十三五"重点研发项目 2017YFB0403500*.
- 协助项目负责人组织、主持、参与科技部及项目召开的相关会议。
- 与秘书组成员共同协调项目参与单位（华普永明、飞乐音响、建科院、海康威视等）及公司研发、财务、业务等部门的资源，保障项目按计划书执行。

2014 **智能路灯控制系统 1.0**, *C++*.
- 路灯控制软件。实现调光、调色温、状态监控、故障查询/报警等功能。测试支持 5000+ 设备。
- 2 人项目，负责服务端，同伴负责客户端。2015 年开始转为智慧路灯控制系统（前文）。

2014 **高速公路情报板远程监测平台**, *C++*.
- 通过 GPRS 远程检测高速公路情报板产品的工作状态、实时画面，做到故障报警。
- 降低客户的现场巡检成本，将人工全路段巡检频率降低，提供定向运维的建议。
- 2 人项目，负责 Linux 服务端的开发，同伴负责 Windows 客户端开发。2014 年 2 月上线后，服务端仅有一次 2016 年的功能升级停止服务 2 分钟，其余时间稳定运行。

2011–2012 **3D 掌纹识别**, *MATLAB*.
- 提取 3D 掌纹特征，达到当时世界领先的 98.7% 的身份验证准确率。（此前的文献不到 93%。）
- 通过 3D 掌纹全局特征索引，将单个采样验证速度（比实验室原成果）提高至 2 倍。

工作技能

计算机语言　工作项目使用: C++, Objective-C；个人项目使用: Python, MATLAB, LaTeX

公开演讲　向公司管理层及股东作部门工作汇报；产品发布及行业会议主题演讲 (a,b,c)；培训等

英语　英语流利对话、读写，可作为工作语言。获海文杯英语竞赛一等奖（上海市第 11 名）、第三届"21 世纪杯"全国英语演讲比赛二等奖；CET-6 652 分 (百分位 99%)

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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 adopt DevOps 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 → Project 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.

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.
○ Appointed *Corporate Mentor of Student Innovation Center*. Cert No. SI2019059.

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)