KIM, SANG HYUN

Senior Software Engineer

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📍 Washington, USA

EXPERIENCE

Senior Software Engineer

Microsoft

📅 April 2018 – Ongoing   📍 WA, USA

- **Telemetry Platform**:

  As a service owner, I developed features such as suppressing alerts and authorizing users. Also integrated services with MS Graph, Azure Active Directory, Azure Function App, etc.

- **Azure IoT**:

  As a developer, I developed Azure IoT reference solutions for remote monitoring and predictive maintenance.

Principal Software Engineer

Johnson Controls

📅 October 2015 – March 2018   📍 California, USA

- **Johnson Controls IoT Cloud Service**:

  As a technical leader, designed and developed SaaS for IoT (web services, databases, real-time message processing, CEP rules, Search engine). The platform is a SOA-based, multi-tenant, IoT cloud platform that will receive 100 million messages per day.

- **Microsoft Risk Management Cloud Service**:

  As a key engineer, designed and developed Complex Event Processing cloud service that analyze correlation of messages from n millions of devices and detect threats in real-time using rules engine.

Principal Software Engineer / Architect

Cisco Systems, Inc.

📅 January 2005 – October 2015   📍 United Kingdom & USA

- **Cisco Video Cloud Platform**:

  As a development team leader, designed and developed Android tablet and phone applications that have magazine style UI, Black & White video, Google statistics, On demand video play, and TV Guide in a short time. (6 months with 3 engineers)

- **Cox Back-end System**:

  As an architect, designed entire Cox back-end system from scratch that hugely improved maintainability of Cox video broadcasting system. Cox back-end system includes ingesting TV guide from 3rd party, live and on-demand video streaming, TV Guide and Search, Recommendations etc which services n million subscribers.

- **Cox & Comcast X1 Platform**:

  As an architect, delivered design with Cox & Comcast design team that reduces operation cost for Cox by integrating Comcast X1 platform and Cox back-end system.

- **DirecTV & Cox Set Top Box**:

  As a key developer, developed multi-room DVR, parental control, PPV, and many features for set-top box applications that was targeting to n millions of subscribers.

HONORS

🏆 **Cisco CEO Award in 2010**
Awarded by successfully delivering Cox multi-room DVR project as a key engineer

🏆 **Cisco CEO Award in 2006**
Awarded by successfully delivering DirecTV DVR project as a key engineer

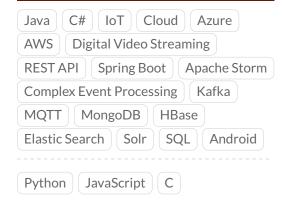🏆 **Cisco Application Contest 2nd place**
Awarded 2nd place from Cisco Application Contest Worldwide with Parental Control Android Application

👥 **Developer Conference Presenter in Monaco**
Selected as a presenter at Cisco Developer Conference in Monaco with JSON Web Token topic

STRENGTHS

Java   C#   IoT   Cloud   Azure
AWS   Digital Video Streaming
REST API   Spring Boot   Apache Storm
Complex Event Processing   Kafka
MQTT   MongoDB   HBase
Elastic Search   Solr   SQL   Android

Python   JavaScript   C

EDUCATION

M.S. in Computer Science

University of Southern California

📅 August 2014 – December 2017

B.S. in Information and Communication

Korea Univ. of Technology and Education

📅 March 1995 – February 2003

Software Engineer

Hyundai Digital Tech

📅 January 2003 – January 2005　　📍 South Korea

- **Korea Digital Broadcast Set Top Box**:
  As a key engineer, developed device drivers, OS porting, and managed a software release. a team delivered high quality products in short time including first HD set-top box in South Korea (3 months with 4 engineers)