Ryan **Shah**

SOFTWARE ENGINEER · COMPUTER SCIENCE AND MATHEMATICS MAJOR WITH PHYSICS MINOR · UNIVERSITY OF KENTUCKY

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Skills

DevOps	AWS, Azure, Docker, Kubernetes, Jenkins, MySQL, PostgreSQL
Web	Angular, HTML5, CSS, REST API, PHP, Node.js, SpringBoot
Programming	C/C++, Python, JAVA, C#, Groovy, Ruby

Experience

Lexmark International, Inc. — *Lexington, KY*

SOFTWARE ENGINEER - ACCOUNT AND IDENTITY MANAGEMENT — *May. 2020 - Present*

- As part of the ACIM team, I was responsible for maintaining a variety of applications that facilited account management, authentication, and identity federation for our cloud services.
- Facilitated the transition to Azure B2C identity management service from our in-house Ruby on Rails identity provider.
- Developed serveral customer facing Angular UI's and C# services and their deployment to our Kubernetes environment.
- Helped transition serveral services from AWS EKS to Azure AKS.

TECHNICAL ROTATION PROGRAM — *Jul. 2018 - May. 2020*

- During this program I spent 8 months on 3 different teams in the organization.
- On the Core Team, I helped to design and build fully automated CI/CD Jenkins pipelines to support the transition of our suite of dockerized microservices to Kubernetes from AWS ECS as well as maintain several Java libraries and SpringBoot services.
- On the Firmware Security Team, I worked to handle incoming critical CVE's in our firmware, as well as develop a service on our devices that enables automatic updating of critical SSL certificates for authentication with Lexmark and 3rd-party servers.
- On the Cloud Solutions Team, I created a prototype feature for our cloud services that would allow remote access to IoT devices in our system through the use of AzureIoT Device Streams.

PPQA TOOLS TEAM INTERN — *Aug. 2016 - Jun. 2018*

- Created a suite of python scripts that collect usage data from multiple data sources to detect supply failures and end of life.
- Built a C# desktop application, and companion command line tool, to analyze binary packet data.
- Designed a basic VR experience to manipulate a 3D model for showcases.
- Used machine learning to train a model that could identify print errors in QA tests.
- Developed a logging pipeline utilizing HyperLedger Fabric blockchain and ActiveMq.

Extracurricular Activity

B10S (B1t 0n the Security, Underground hacker team) — *S.Korea*

CORE MEMBER — *Nov. 2011 - PRESENT*

- Gained expertise in penetration testing areas, especially targeted on web application and software.
- Participated on a lot of hacking competition and won a good award.
- Held several hacking competitions non-profit, just for fun.

WiseGuys (Hacking & Security research group) — *S.Korea*

MEMBER — *Jun. 2012 - PRESENT*

- Gained expertise in hardware hacking areas from penetration testing on several devices including wireless router, smartphone, CCTV and set-top box.
- Trained wannabe hacker about hacking technique from basic to advanced and ethics for white hackers by hosting annual Hacking Camp.

PoApper (Developers' Network of POSTECH) — *Pohang, S.Korea*

CORE MEMBER & PRESIDENT AT 2013 — *Jun. 2010 - Jun. 2017*

- Reformed the society focusing on software engineering and building network on and off campus.
- Proposed various marketing and network activities to raise awareness.

PLUS (Laboratory for UNIX Security in POSTECH) *Pohang, S.Korea*

MEMBER *Sep. 2010 - Oct. 2011*

- Gained expertise in hacking & security areas, especially about internal of operating system based on UNIX and several exploit techniques.
- Participated on several hacking competition and won a good award.
- Conducted periodic security checks on overall IT system as a member of POSTECH CERT.
- Conducted penetration testing commissioned by national agency and corporation.

MSSA (Management Strategy Club of POSTECH) *Pohang, S.Korea*

MEMBER *Sep. 2013 - Jun. 2017*

- Gained knowledge about several business field like Management, Strategy, Financial and marketing from group study.
- Gained expertise in business strategy areas and inisght for various industry from weekly industry analysis session.

Honors & Awards

INTERNATIONAL

2018	**Finalist**, DEFCON 26th CTF Hacking Competition World Final	*Las Vegas, U.S.A*
2017	**Finalist**, DEFCON 25th CTF Hacking Competition World Final	*Las Vegas, U.S.A*
2014	**Finalist**, DEFCON 22nd CTF Hacking Competition World Final	*Las Vegas, U.S.A*
2013	**Finalist**, DEFCON 21st CTF Hacking Competition World Final	*Las Vegas, U.S.A*
2011	**Finalist**, DEFCON 19th CTF Hacking Competition World Final	*Las Vegas, U.S.A*
2012	**6th Place**, SECUINSIDE Hacking Competition World Final	*Seoul, S.Korea*

DOMESTIC

2015	**3rd Place**, WITHCON Hacking Competition Final	*Seoul, S.Korea*
2017	**Silver Prize**, KISA HDCON Hacking Competition Final	*Seoul, S.Korea*
2013	**Silver Prize**, KISA HDCON Hacking Competition Final	*Seoul, S.Korea*
2013	**2nd Award**, HUST Hacking Festival	*S.Korea*
2010	**3rd Award**, HUST Hacking Festival	*S.Korea*
2012	**3rd Award**, Holyshield 3rd Hacking Festival	*S.Korea*
2011	**2nd Award**, Holyshield 3rd Hacking Festival	*S.Korea*
2011	**5th Place**, PADOCON Hacking Competition Final	*Seoul, S.Korea*