Richard Hu

AWS|Kubernetes|Docker|Jenkins|Ansible|DevOps|Full stack|Nodejs|React|Linux kernel|
networking|Security

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Summary

-- Extensive experience across the full stack web server development. (Node, Express, React, Redux,
 Webpack, PostgresSQL, Nginx, Grunt, Gulp, Babel, etc)

-- Expertised in Amazon Web Services (EC2, CloudFormation, VPC, Route53, CloudWatch, RDS,
 DynamoDB, S3, SES, AWS lambda, IAM, Elastic Load Balancing, CloudFront, Kinesis, etc)

-- Strong experience in setting up and automating CI/CD with Jenkins, docker and kubernetes.

-- Experience and much practice on Docker container and automation tool Ansible.

-- Strong JavaScript, HTML5, CSS3, RESTful API skills.

-- Extensive experience in software development with C, C++ /STL/Boost, Java, Python, Bash Shell
 and Lua script.

-- Expertised in network security with strong developing experience of virtual private networks –
 IPsec, OpenVPN, PPTP and GRE.

-- Strong experience in Linux/Unix kernel and drivers development. Exceptional experience in Linux
 troubleshooting and system adminastration.

-- Strong knowledge and extensive experience in networking and security.

Experience

Senior DevOps/AWS Cloud Architect at Macquarie Group
March 2018 - Present

Senior Full Stack and DevOps Engineer at Department of Justice NSW
July 2017 - March 2018 (9 months)

   Full Stack software development with NodeJs, React/Redux, loopback framework, MongoDB, AWS
    lambda, SQS, API Gateway, etc.

   Set up and Automate CI/CD pipeline with Kubernetes, Docker, Jenkins, Ansible, AWS
    CloudFormation, ECS, ELB, CodeCommit, EC2, VPC, Route53, S3, CloudFront, and so on.

Senior Cloud Engineer, DevOps at Silicon Labs
January 2017 - August 2017 (8 months)

Senior cloud software engineer, DevOps at Zentri
January 2014 - December 2016 (3 years)

As DevOps and full stack web developer working to build automated CI/CD pipelines, cloud software (Front-end and Back-end web services) for IOT (Internet Of Things).

Developed CI and auto deployment code. (Docker, Jenkins, and Puppet)

Developed auto-creation of customer cloud and DMS (Devices Management Services).
Skill Set used in this project include: node.js, AWS (EC2, CloudFormation, VPC, Route53,
 CloudWatch, RDS, DynamoDB, S3, SES, AWS lambda, etc) , Nginx.

Google Maps and cloud programming. (Geolocation, Markers, Cluster, Circles etc).

Senior Software Engineer at NetComm
March 2011 - January 2014 (2 years 11 months)

Web server development with JavaScript, HTML5, CSS3, MsSQL, JQuery, CGI, etc.

Designed and developed system software build, test and release automation. (Linux)

Designed and developed devices automation test system which tests hundreds of devices in one
 go. (C#, .net, MsSQL and Python)

Developed and ported 3G/4G LTE/GPS/Voice wireless modules and WiFi module. (C/C++/ Shell/
AT commands)

Developed DNP3 (SCADA system) module SDK, which is used for real time communications
 between various types of data acquisition and control equipment. (C++/STL/Boost Library,
 multithread and socket programming)

Developed secure Virtual Private Networks - IPsec, OpenVPN, PPTP and GRE. (C/C++/Shell
 Script)

Implemented and integrated general router network functions: SNMP, DDNS, NAS, NTP client,
 routing firewall, NAT, DMZ, mac/port/ip filtering.

Improved building systems. Reviewed codes, functional design and architecture design.

Software/Firmware Team Leader at OCLARO
August 2009 - September 2010 (1 year 2 months)

Developed and maintained the firmware of our optical EDFA modules: EPRE and Cortese, which
 are both CISCO customized linecard products.

Communicated with global and multi-functional peers in USA and UK for projects management, tasks assignment and incidents solution.

Guided and established an excellence automation test center in SHA site for software/firmware verification and optical performance test.

Senior OS Software Engineer, Team Leader at Hypercom Asia Singapore
October 2007 - July 2009 (1 year 10 months)

In charge of developing Linux boot loader (u-boot) and bringing-up Linux kernel for our new generation product terminal.
Be responsible for T4250 black memory reduction project.
Be in charge of C4010 security display project.
Developed Bluetooth and ISDN modules (AT-commands) for our product.

Ported new version SSL module to our current OS.
Be in charge of Middleware SSL T-e-T integration project.

Developed and maintained our security infrastructure, which consists of SSL transmission, PKI, RSA (keys management, certificates signature and verification, SHA and MD5 hash, etc).

Solving incidents and bugs like PPP issue, serial communication issue, DNS issue, window focus and so on for our firmware (OS, Syslib, and Application Manager).

Give training and also help team members with certain difficult or urgent issues. In addition, review source codes developed by team members.

Senior Software Engineer
February 2005 - September 2007 (2 years 8 months)

Developed and maintained the firmware of a wireless Wi-Fi Router as a core software engineer. I was in charge of designing the system structure, writing our own boot loader, developing and porting majority of modules. I also developed a SOHO router NP25G, in which the main feature is WiFi-Secure-Config, which enables user to connect to AP conveniently.

Responsible for the software development for a Singapore government project, which utilized wireless router NP18A, by tailoring and modifying some drivers and some applications, to set up a security management system used in mass rapid transit (MRT) subway system.

Software Developer at Alcatel-Lucent
July 2001 - January 2005 (3 years 7 months)

Be responsible for developing of the hardware dependent software (HDS) of MPC859DSL, developing POST (Power On Self Test) code, developing Linux boot loader, developing and porting some drivers such as PCI bridge driver and L2 switch driver.

Developped and ported I2C driver and SPI drivers,wrote documents.

Cooperate with testing engineers to debug and troubleshoot firmware.

Be responsible for developing some loopback test code.
Developed and tested L2 Cache code (Assembly language).
Defined top level design (TLD) document for HDS.

Education
Southeast University
Bachelor, Computer engineering and science, 1997 - 2001
Bachelor

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Linked in

Contact Richard on LinkedIn