



EDUCATION:

- **University of Illinois at Chicago, IL (GPA: 3.39/4.00)**
Master's in Electrical and Computer Engineering
August 2016 – May 2018
- **SRM University, India (GPA: 3.56/4.00)**
Bachelors in Instrumentation & Control Engineering
Aug 2012 – May 2016

TECHNICAL SKILLS:

- **Programming Languages:** Java(Basic), C++, Python, Embedded C, MATLAB, (Basic) HTML & CSS, Shell Scripting, Batch Scripting
- **Python Libraries:** Boto, Numpy, Troposphere, Scipy, Cvxopt
- **Cloud Platforms:** AWS, Azure, Digital Ocean
- **Amazon Web Services:** EC2, S3, Route 53, CloudFront, IAM, VPC, RDS, Cloud Watch, ELB, Auto Scaling, CloudFormation, EFS, EBS, Lambda, Certificate Manager, CLI, Elastic Beanstalk
- **Microsoft Azure:** Site Recovery, Virtual Machines
- **Continuous Integration/Testing:** Jenkins, Maven
- **Continuous Delivery/Deployment:** AWS CodeDeploy, CodePipeline
- **Configuration Management:** Ansible, Puppet, Terraform, Vagrant
- **Containers:** Docker, AWS ECS & ECR
- **Databases:** MySQL (Basic), DynamoDB (NoSQL)
- **Version Control:** Git, GitHub, AWS CodeCommit
- **Monitoring:** Nagios Core, AWS CloudWatch
- **Microsoft Azure:** Site Recovery, Virtual Machines
- **Web Servers:** Tomcat, Apache 2.4
- **Virtualization:** VMware ESXi 6.0, vSphere 5.5, oVirt, VirtualBox
- **Operating Systems:** Linux (CentOS7, Ubuntu 16.04, Amazon Linux), Windows: Server (2012 R2), Desktop (7,8,10)
- **Project Management:** JIRA, Redmine
- **App Development:** Android Studio
- **Team Collaboration:** Confluence, Pidgin, TeamViewer
- **Networking:** SSH, TCP/IP, NFS, DHCP, SFTP, NTP, DNS
- **Misc.:** Office 365, Exchange, Wireshark, Eclipse IDE, LAMP, Putty, Cygwin, WinSCP, Anaconda Spyder, Sublime, WordPress

CERTIFICATIONS:

- **AWS Certified Solutions Architect (Associate)** – [Feb'18 – Feb'20]
- **AWS Certified Developer (Associate)** – [Mar'18 – Mar'20]
- DevOps on AWS: Infrastructure on Cloud – [\[Udemy\]](#)
- Master Jenkins CI for DevOps and Developers – [\[Udemy\]](#)
- Project in DevOps: Real world processes – [\[Udemy\]](#)
- Devops: Infrastructure Automation with Terraform – [\[Udemy\]](#)

WORK EXPERIENCE:

- **System Administrator Graduate Assistant** (August '17 – Current)
Research Resources Center, UIC
 - Providing systems & technical support to 150+ users in a research environment primarily for hardware, software and network issues.
 - Infrastructure support and maintenance of existing RRC applications in production environment
 - Project/Issue tracking using JIRA, REDMINE

- Customer support experience: Tracking and resolving issues through RT Ticketing system
- Office 365 and Exchange online administration and migration
- Configure-Troubleshoot-Support Desktops and Servers, Network Printers, VPN, Active Directory group objects and permissions
- Installation/Administration of Windows Server ('12R2, 16), Linux (Ubuntu, CentOS7), Windows (7,8.1,10)
- Working knowledge of VM Deployment/Management using VMWare ESXi, vSphere5.5 & oVirt
- Successfully added 2 Dell Blade servers to VMWare cluster
- Responsible for Planning and Testing Infrastructure Disaster recovery using Azure Cloud and simulating failover conditions
- Creating manifests for VMs in production using Puppet
- Misc.: Apache, Wordpress, Nagios Core, Bastion server, Samba share, MySQL, DNS, File Server

● **Website Developer Assistant** (May '17 – August '17) **Department of Medicine, UIC**

- Successfully redesigned DOM website and division websites using wordpress CMS on staging/production environment
- Using HTML/CSS for editing page elements
- Tracking issues through RT for webpage modifications requests

PROJECTS:

- **RRC Infrastructure Disaster Recovery** (April '18 – Ongoing)
 - Cost Analysis and Testing Disaster Recovery for virtual machines on RRC infrastructure using Azure Site Recovery service
 - Deploying, configuring Azure Configuration Server on VMWare private cloud and backing up 5 production virtual machines
- **Android Application for P2P File Transfer via Relay** (April '18)
 - Developing App in Android Studio for transferring files from Device A to Device C through Device B using Wi-Fi Direct connection and TCP protocol and socket programming
 - A – Server running server app, B – Client and server code on different threads in same app, C – running client app
 - Evaluating battery and throughput performance on all devices
- **Project in Devops** – Udemy Course (Mar '18)
 - Web based booking application with 3 environments mimicking development, staging and production stages
 - Infrastructure Provisioning - Vagrant, Configuration Management – Ansible, Version Control - Git, Central Repository – Github, Continuous Integration/Deployment – Jenkins
 - Extra – Containerization using Docker – Docker Lab for wordpress

- **abhrasinha.com – Personal Website** (Nov '17 – Mar '18)
 - Testing and deploying different architectures on AWS for hosting Wordpress website for High Availability & Scalability
 - Amazon Linux, Apache 2.4, PHP 7.0 and MySQL Client on EC2 instances in HA, Auto Scaling group, EFS mounted web directory, S3 – media, RDS (Multi A-Z) - MySQL Server 5.6
 - Cron job running on staging for copying website directory to S3 bucket for backup every 2 days

- **DevOps on AWS** – Udemy Course (Feb '18 – Mar '18)
 - Version control using Git and Github
 - Building CloudFormation template using troposphere library and Boto 3 SDK for LAMP stack, Jenkins and sample webserver
 - Created Ansible roles for php, codedeploy, apache, Jenkins, phpunit and playbooks for lamp stack
 - Using AWS Codedeploy for deploying code and Codepipeline for setting up continuous delivery on staging

- **Jenkins Master Node** – Udemy Course (Jan '18 – Feb '18)
 - Installation of Jenkins in EC2, Maven build tool for Java
 - CI: Jenkins polls changes from Github after commit is made
 - CD: Automated Build pipeline delivers code to staging and deployment to production using Apache Tomcat web servers
 - Artifact repository in S3, Jenkins pipeline as code - jenkinsfile
 - Plugins: Git, Checkstyle, Copy artifact, Deploy to container, SSH Slaves, pipeline

- **Nagios Monitoring Server** (Jan '18)
 - Installation of Nagios core on EC2, monitoring of host machines using NRPE daemon running on Nagios master and hosts
 - Monitoring: Disk usage, CPU load, processes, memory, SSH access