Akshat Sinha

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EDUCATION

UW-MADISON
MS in Computer Science
Jan 2021 - Jan 2023 | Madison, US

IIIT-DELHI
B.Tech in Computer Science
Aug 2014 - May 2018 | Delhi, IN
Cum. GPA: 8.76

ST. COLUMBA'S SCHOOL
Grad. May 2013 | New Delhi, India

LINKS

Github:// **akshatgit**
LinkedIn:// **akshat-sinha**
DBLP:// **Akshat-Sinha**

GRADUATE
Topics in Computer Security and Privacy
Software Engineering
Parallel and Throughput-Optimized
Programming
Teaching Asst
CS-354, UW-Madison(Spring'21)

UNDERGRADUATE
Teaching Asst
Systems Management, IIIT-Delhi(2017)

SKILLS

PROGRAMMING
Over 5000 lines:
Python • C• Java
Over 1000 lines:
Shell

TOOLS
Databases
Redis • MongoDB • MySQL
Pub/Sub
Kafka
Monitoring
Nagios • Prometheus
Icinga • Graphite • Grafana
Web-framework
Flask • Django
Orchestrators
Nomad • Kubernetes
Misc
HAproxy • Puppet • Jenkins
Docker • AWS • GCP
GCP • Kubeflow • Seldon

EXPERIENCE

MEDIA.NET | Site Reliability Engineer
June 2018 – Dec 2020 | Mumbai, IN
- Part of DevSecOps team for more than 6 months. Had setup Wazuh, CVE monitoring tool and also headed development of an in-house tool to track system vulnerabilities across the entire infrastructure. Resulted in fixing 1000+ system level (per server) vulnerabilities due to the presence of old and outdated packages.
- Setup Nomad cluster using Consul for auto-discovery of servers. We were able to migrate multiple critical applications written in Java, Golang and NodeJs to docker environment, which significantly reduced their downtime due to various system failures.
- Worked on monitoring and alerting system for the company. The stack consisted of Nagios, Icinga, Prometheus, Graphite and Pagerduty.
- Explored Kubernetes for creating POC of micro services architecture. Used Jenkins to create Blue-Green deployment system with version control of service.
- Handled data pipeline for the team. Used Kafka, Redis and Hadoop for the task.
- Metric/Logging pipeline setup with Graphite and ELK.

GRANULAR.AI (PART-TIME) | AIOps Engineer
May 2020 – Oct 2020 | Remote

- Part of an early stage startup for cloud native application development.
- Worked on setting up Machine learning pipeline for the application using Polyaxon, Kubeflow and Seldon tools.
- Contributed in creating a Kubernetes platform agnostic application.
- Created CI/CD in GitHub Actions and Google Build Platform with semantic versioning of the application

RESEARCH

NETWORK SECURITY LAB | Undergraduate Researcher
Mentor: Dr. Sambuddho Chakravarty
May 2017 – May 2018| IIIT-Delhi, IN
The project consist of detecting various censorship methodologies employed by different ISPs in India, and in the second part we evaded censorship in all ISPs.
Publication: Where The Light Gets In: Analyzing Web Censorship Mechanisms in India. **IMC 2018**

IIT MADRAS | Research Intern
Mentor: Dr. B.Ravindaran and Dr. Karthik Raman
May 2017 – Jun 2017 | Chennai, IN
- Clustering protein-protein interaction(PPI) network using deep learning and non deep learning methods

CVML LAB | Undergraduate Researcher
Mentor: Dr. Chetan Sharma and Dr. Anubha Gupta
May 2016 – Aug 2016 | IIIT-Delhi, IN
Segmenting the 3-D volume image into 4 Region of Interest.
Publication: Deep neural networks for segmentation of basal ganglia sub-structures in brain MR images. **ICVGIP 2016**