

TARUN VERMA

tarun-verma.com | tr.vrma@gmail.com | +91 (997)-173-8067

EDUCATION

IIIT-DELHI

OKHLA, NEW DELHI

B.TECH. COMPUTER SCIENCES

2012 - 2016

RAMJAS SCHOOL

PUSA ROAD, NEW DELHI

CBSE 10+2

2012 | %: 91.2/100.0

CBSE 10

2010 | GPA: 9.6/10.0

ABOUT

DOMAINS

Systems/networks engineering, with focus on scalability, security, as well as automation. Other academic interests include (but are not limited to) **cryptography, theoretical computer science**, pure mathematics and high performance computing.

COURSES

Advanced Networking
Software Defined Networking
Network Security
Security Engineering
Applied Cryptography
Modern Cryptography
GPU Computing
Advanced Graph Theory
Logic for Computer Science

SKILLS

LANGUAGES

C/C++ • Python • Golang (beginner)
• HTML/CSS • SQL

TOOLS+TECH

Apache Kafka • Apache Cassandra •
Apache CloudStack • Druid • Redis
• AWS • RabbitMQ • CI/CD
(Jenkins based) • Varnish Cache •
HAProxy • Puppet • Elastic Stack •
Nagios • Icinga

LIBRARIES+FRAMEWORKS

Metasploit • CUDA • OpenMP •
OpenMPI • OpenSSL • SageMath •
Vowpal • Ryu SDN Framework

EXPERIENCE

OPERATIONS ENGINEER/DEVOPS | DIRECTI (MEDIA.NET), MUMBAI

July 2016 – Present | Mumbai, India

- Part of Media.net's Ad Exchange Team (MAX)
- AWS Cross-region set-up of MAX
 - Setup of entire infra, from front points to caching (Redis), serving (Node), learning (Vowpal), MQ (RabbitMQ), and logging (ELK).
 - Orchestration and puppetization of the set up, which helped us replicate it to other regions for traffic distribution.
- MAX Kafka pipelines
 - Set up of mirrored Kafka pipelines across all serving regions.
 - Set up of Kafka streaming processes for data aggregation.
 - Set up of internal reporting interface using Druid.
- MAX ELK for monitoring and logging
 - Elasticsearch/Kibana setup, optimizations, and associated dashboards.
 - Logstash optimizations for high data throughput.
- MAX CloudStack
 - Undertaken to deploy infrastructure cloud services on our DC.
 - Set up with KVM as hypervisor.
- Supervision and upgrades of aforementioned stacks, apart from scripting and automation, as well as front end work involving web application delivery controllers such as **F5's Big IP** and **Citrix NetScaler**.

PROJECTS & COURSEWORK

ENSORSHIP SUBVERSION IN ANONYMOUS NETWORKS

2015-2016 | Undergraduate Thesis | IIIT Delhi

Accessing Tor censors without sacrificing anonymity. Implemented a new anonymous authentication scheme to achieve the same.

Advised by **Dr. Sambuddho Chakravarty**.

AVOIDANCE ROUTING

2015 | Term Paper | IIIT Delhi

Surveyed various avoidance routing schemes.

Supervised by **Dr. Dheeraj Sanghi**.

INTRUSION DETECTION SYSTEM

2014 | Course Project | IIIT Delhi

Wrote a basic IDS that monitors network traffic, memory accesses and resource utilization to detect intruders and alerts the user.

Supervised by **Dr. Anupam Joshi**.

HONORS & AWARDS

- **Prodigy in Computer Science**
2011 | Ramjas School, Pusa Road | New Delhi, India
- **Excellence in CBSE Mathematics and English**
2012 | Ramjas School, Pusa Road | New Delhi, India
- **All India Rank 101, Junior Science Talent Search Examination**
2010 | Government of India, Science Division | New Delhi, India
- **Project Citizen, Best Poster & Presentation**
2010 | Center for Civic Education | USA