Meghdeep Ray

E-mail : meghdeepr@gmail.com

Phone : +91 97 42 629690

Website: meghdeepray.in

Address: 59 Ballygunge Circular Road
5th Floor , Unit 5
Kolkata - 700 019 , West Bengal , India

Work experience

ThreatLandscape   June 2018 — Present
Senior Software Engineer

Utilized Airflow to orchestrate data pipelines on the scale of multiple gigabytes for data ingestion across multiple databases including BigQuery, Postgresql & ElasticSearch.

Used a BloomFilter implementation to quickly categorise millions of IP addresses into whitelists, greylists & sinkholes.

Developed several NSQ pipelines for parallel data steam processing across several distributed systems.

Integrated OpsRamp & IBM QRadar platforms with codebase for rapid updates on risk levels for Alerts.

Deeply involved at the architecture level for all components worked on, developed competency in designing and executing complex architectures.

Interfaced with several different teams to collaborate on building out various components.

ParallelDots   February 2017 — May 2018
Technical Lead

As Tech Lead of the API Platform, was responsible for the development & deployment and ensuring end-to-end functionality of the entire stack.

Rewrote the entire API server from scratch which improved performance by a factor of 3.

Pushed for the change from a prepaid model to a postpaid model which lowered the entry barrier and almost immediately resulted in an uptick in platform usage.

Led the development on monetizing the API Platform which brought in revenues growing month on month at a rate of almost 50% per month.

Developed Wrapper Libraries for API access in 4 different languages (Python, Ruby, Go, Julia) and maintained the code base.

Worked on several client projects, developing and deploying a large range of Machine Learning based products.

ParallelDots   August 2016 — Present
Data Engineer

Developed a Keyword generation toolkit built on top of Google's SyntaxNet.

Developed numerous client projects using a wide range of frameworks.

Was sole in charge of a significant portion of the Data Analytics vertical.

Packaged and enabled the portability of several code bases across several servers.

Developed modules for News ingestion analysis from multiple sources towards the development of Karna, a product geared towards market research, competitive bench-marking and reputation management.

Ericsson India   June 2015 — July 2015
Intern

Worked on generating business intelligence by trend analysis of ticketing data that had been familiarised with during prior internship.

Interacted with various teams to understand key metrics to look for and interpret.

Created several internally hosted dashboards for quick interpretation of results.
Project was well received and widely praised for technical accomplishment in ingesting large volumes of ticketing data and producing useful metrics with low latency times.

Ordell Ugo   September 2013 — September 2014

Member of Technical Staff

Working in Image Processing using OpenCV to libraries to identify littering in areas under CCTV surveillance and generate automatic alerts.

Ericsson India   June 2014 — July 2014

Intern

Worked on SLA Reporting utilizing Oracle Developer SQL to generate automated reports involving several data filtering options.Gained familiarity with production databases.
Worked on Rhino Open Cloud Server Architecture.
Trained with Information Security Team in the basics of enterprise level cyber security.

Education

Computer Science Engineering   August 2012 — Present

PES University Bangalore

Courses Taken :

1st Semester :

- Mathematics
- Programming in Java
- Chemistry
- Electronics Engineering
- Statics

2nd Semester :

- Mathematics
- Computing Technologies
- Physics
- Electrical Engineering
- Dynamics

3rd Semester :

- Discrete Mathematics
- Data Structures in Java
- Programming in C
- Computer Organization and Architecture
- Digital Design

4th Semester :

- Linear Algebra
- Analysis and Design of Algorithms
- Database Management Systems
- Introduction to Micro Processors
- Finite Automata and Formal Languages

5th Semester :

- Computer Networks - I

- Operating Systems
- Compiler Design
- Principles of Programming Languages
- Python Application Programming

6th Semester :

- Computer Networks - II
- Unix System Programming
- Web Technologies
- Software Engineering
- Advanced C++
- Advanced Algorithms

7th Semester :

- Web Technologies 2 : Rich Web Applications
- Object Oriented Modelling and Design
- System Modelling and Simulation
- Big Data
- Natural Language Processing

8th Semester:

- Final Year Project using SVMs to perform Machine Learning to predict BitCoin price fluctuations based on over 30 real world metrics including stock indices, gold price and major currencies (Dollar, GBP, Yen).
- Software Testing

Experiences

Since joining college, participated extensively in over 38 hackathons including:

1. PESIT Hash Code Hackathon - Built a virtual classroom collaboration platform
2. PESIT Ayana Hackathon - Built an automated attendance system
3. Nokia Idea Hackathon - An application to generate a live disease heatmap for your area using open source medical data regarding disease outbreaks
4. Google AdMob Hackathon - Travel application
5. Hack59 - A women's safety app
6. PESSE inGenius Hackathon 2014 - HasH GaG App [https://www.bunkr.me/meghdeepray/hashgag-stable]
7. IBM Build with Watson Hackathon 2015 - Using Watson's Machine Learning API to generate personalized lecture notes from audio files.
8. Organized PESIT Ayana Hackathon 2015 - Built the network to provide users with internet.
9. JP Morgan Code for Good 2015 - Worked on making a collaboration platform for Dream School Foundation.

As a part of the Cloud Computing and Big Data Laboratory of PESIT, completed a team project on Dynamic Firewalls. Identified packet header attributes whose anomalous behavior can be used to identify an attack. Also developed a project to parallelize Hadoop tasks on Nvidia GPUs using CUDA.

Attended various technical conferences and seminars, including :

1. Pycon India 2013, 2015, 2016
2. The Fifth Elephant Conference 2018
3. Cloud Computing Workshop
4. MIT Discotech on Counter Surveillance Technologies
5. NNSC [National Networking Security Conference]

Was an organiser for the PESIT Ayana 2014 Hackathon, the largest hackathon in the college. Was responsible for deploying and maintaining the entire network infrastructure for the event.

Was lead organiser for the first event of Random Hacks of Kindness Delhi Chapter held in July 2017. Organised a successful event attended by around 100 people after starting from scratch in an unfamiliar city. Was primarily in charge of arranging the majority of on ground logistics and arrange sponsorships from both corporate companies and startups. Was the head of the Random Hacks of Kindness Delhi Chapter throughout 2017.

Was a mentor for the Technovation challenge, aimed at empowering young girls to becoming entrepreneurs in technology. Guided a team in developing an app for sharing school notes and collaborative studying in rural areas.

Skills

Highly skilled at Python, ranking amongst the top 10% on StackOverflow.

Strong foundation of knowledge around cloud platforms including AWS, Gcloud & Azure.
Excellent at verbal and written communication skills.

Proficiency in :

- Machine Learning Frameworks: Dlib, PyTorch, Theano, Fasttext
- Database Deployment & Management: BigQuery, Postgresql, MySQL, MongoDB
- Programming Languages: Java, C++, Ruby, GO Lang, LISP
- Software Tools: Redis, NSQ, RabbitMQ, Celery, ElasticSearch, Kibana
- Workflow Automation & Orchestration: Airflow