

Tushar Gautam

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EDUCATION

CU, BOULDER

MS, COMPUTER SCIENCE

Expected, May 2023 | Boulder, CO

NIT, TRICHY

B.TECH, PRODUCTION ENGINEERING

May 2017 | Trichy, India

LINKS

- Github
- LinkedIn
- Website
- Stackoverflow

COURSEWORK

GRADUATE (FALL'21)

- Design and Analysis of Algorithms
- Natural Language Processing
- Machine Learning (*Teaching Asst*)

SKILLS

Programming Languages

• Python • JavaScript • C++

Technology

- Nodejs
- Docker • Kubeflow • Kubernetes
- Mesos • HDFS • Ceph
- Kafka • Graylog
- InfluxDB • MongoDB
- Ansible

EXPERIENCE

LG ADS | SOFTWARE ENGINEER

June 2017 - June 2021 | Bangalore, India

- Refactored the Live-TV feed database cache data structure, in **Node.js**, to **optimise the search lookup** in Automatic Content Recognition (ACR), providing **vertical scaling**.
- Redesigning the critical Live-TV feed database deployment pipeline to scale across thousands of servers within a sub-second time, providing **horizontal scaling**.
- Designed a distributed log collection pipeline with **Graylog** and **ElasticSearch**, application metrics collection and monitoring with **Telegraf** and **InfluxDB**, streamlined application deployment via **Docker** and **Kubernetes**, High-availability and Load-balancing of critical services via **HaProxy** and **Floating IPs**. Also built expertise on **Mesos**, **HDFS** and **Ceph** for **managing large scale distributed storage and compute cluster**.
- Designed **Machine Learning (ML)** pipeline based on **Kubeflow**.

PYTHON SOFTWARE FOUNDATION | GOOGLE SUMMER OF CODE

April 2016 - Aug 2016

- Contributed to Coala, a static code analysis FOSS, in **Python**, under Python Software Foundation.
- Developed "coala-html" application, an **AngularJS** application to display results from Coala, as an interactive web page.
- Learnt first hand experience with **test-driven development** with 97% **code coverage** for AngularJS and 100% for Python codebase, **test automation** and the importance of **code documentation**. [Github/coala-html](#)

EUROPYTHON | SPEAKER

July 2016 | Bilbao, Spain

- Conducted a training session titled "*Guide to make an open source contribution*", using **Git**, **Continuous Integration and Deployment** tools at EuroPython - an annual International Python Conference in Europe.
- Participants were introduced to an **open source contribution workflow**, and made real time contributions to coala project. [Slides](#).

PAYU | SOFTWARE DEVELOPMENT INTERN

June 2015 - July 2015 | Pune, India

- Refactored a critical client side payment gateway module, in **Javascript** and patched bugs. While still in sophomore years, I got a glimpse of the entire **software life-cycle**.

DELTA CLUB | STUDENT SOFTWARE DEVELOPER

July 2014 - May 2017 | NIT Trichy

- As a core member of the **elite programming club**, I was responsible for the maintenance of the University website, development, administration and updating most of the contents on the institute intranet.

OPEN SOURCE CONTRIBUTIONS

- coala (*Maintainer and Contributor, 2016-2017*) • coala-html • IGitt
- Code2PDF • Topcoder Downloader
- Code-Control