Tushar Gautam

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EDUCATION

University of Colorado Boulder
MS, Computer Science | GPA: 4.0
(focus on Intelligent Systems)
Expected, May 2023 | USA

NIT Trichy
B.Tech, Production Engineering
May 2017 | India

LINKS

- Linkedin:// gautamtushar
- Github:// tushar-rishav
- Stackoverflow:// tushar-gautam

COURSEWORK

Graduate
(Fall'21)
- Design and Analysis of Algorithms
- Natural Language Processing
- Machine Learning

(Teaching Asst)
(Spring'22)
- Distributed Systems
- Neural Networks and Deep Learning

SKILLS

(Programming Languages)
- JavaScript | TypeScript | NodeJS
- Python • Go • C++

(Development | Automation)
- Ansible • Docker • Kubernetes
- Git • Linux • GraphQL
- React • Airflow • Test Automation
- PyTorch (Database)
- InfluxDB • MongoDB • MySQL
- Graph Database (Neo4J) • Redis

(Distributed Systems)
- Kafka • Mesos • Ceph • HDFS
- Graylog • Spark • Airflow

EXPERIENCE

PayPal | Software Engineer Intern
May 2022 – August 2022 | New York City, USA

- Migrated a GraphQL backend service boilerplate from JavaScript to TypeScript for strong type-safety.
- Enhanced further by adding static type checking for GraphQL resolvers based on Schema-first design philosophy.
- Saved hundreds of developers hours across the engineering team along with significant reduction in runtime bugs.

LG Ads | Senior Software Engineer
June 2017 - June 2021 | Bangalore, India

- Optimised Automatic Content Recognition (ACR) service to add 5x improvement in search latency which significantly improved the granularity of the data available for business analytics.
- Lead architect on key platform infrastructure projects which not only streamlined debugging, monitoring and deployment of the microservices but also significantly improved SLA for the customers. Tech stack involved: Mesos, HDFS and Ceph to maintain distributed storage and compute cluster, Graylog and ElasticSearch for log collection, Telegraf and InfluxDB for application metrics collection, Docker and Kubernetes for application deployment, HaProxy and Floating IPs for high-availability and load-balancing of the critical services.
- Built Machine Learning pipeline using Kubeflow to save significant developer hours for the Data Science team.
- Worked on building Automatic Speech Recognition for TV Operating System, evaluating and fine-tuning existing state-of-the-art pre-trained speech recognition models on internal data lake.

Google | Google Summer of Code
April 2016 – August 2016

- Contributed to Coala —static code analysis FOSS —in Python, under Python Software Foundation. Developed "coala-html" application —AngularJS application to display results from Coala, as an interactive web page.
- Incorporated test-driven development with 97% code coverage for AngularJS and 100% for Python codebase, test automation and wrote code documentation as recommended software development practices. https://github.com/coala/coala-html.

Europython | Speaker
July 2016 | Bilbao, Spain

- Presented a session on "*Guide to make an open source contribution*", using Git, CI/CD pipeline at EuroPython — an annual International Python Conference in Europe. Participants made real time contributions to the Coala project. https://tushar-rishav.github.io/EPGit/

OPEN SOURCE PROJECTS

- IGitt and GitMate *(Contributor, 2016)* —GitMate provides automated code review and issue triaging for GitHub projects. IGitt as a backbone for GitMate, provides REST interface to access git hosting services eg GitHub. Contributed bug fixes and implemented new feature to predict bug rank for incoming patch using bug prediction algorithm BugSpot from Google
- Code Control *(Contributor, 2016)* —Online game based on Graph algorithms, player writes program in Javascript to control a bot character in 2D grid with attack and defend strategies and defeat opponent player's character to win the game. Game was live during https://pragyan.org/21/home/ 2016 - annual Tech Fest at NIT Trichy