Tushar Gautam

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EDUCATION

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

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

(Fall'22)
- Advanced Data Structures
- Network Systems
- Database Systems

SKILLS

(Programming Languages)
- NodeJS | TypeScript | Python
- Rust | C++

(Development | Automation)
- Ansible | Kubernetes | Git | Linux
- GraphQL | gRPC | Protocol Buffers
- Test Automation | PyTorch

(Database)
- MySQL | InfluxDB | MongoDB
- Graph Database (Neo4J) • Redis

(Distributed Systems)
- Kafka | Mesos | Ceph | HDFS
- Graylog | Spark

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 static type checking for GraphQL resolvers based on Schema-first design philosophy.
- Saved hundreds of developers' hours across the engineering team.

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

- 5x improvement in latency from optimizing business-critical data distribution network (ACR) enabling more granular business insights.
- Improved customer SLAs, as lead architect on key platform infrastructure projects which streamlined debugging, monitoring and deployment of microservices.
- Tech stack involved: HDFS/Ceph and Mesos/Spark as distributed storage and compute cluster, Graylog-based log pipeline, Telegraf/InfluxDB for application metrics collection, Kubernetes for application deployment, HaProxy for high-availability and load-balancing of the critical services with Ansible for infrastructure deployment automation.
- Saved hundred data scientists hours/week for the Data Science team by setting up Kubeflow-based Machine Learning pipeline.
- Ran experiments to evaluate and fine-tune contemporary state-of-the-art pre-trained speech recognition models on an 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

- Network Systems Final Course Project *(Author, 2022)* Medium-size scalable distributed system for a Real Time Streaming service based on a Spanning Tree topology.
- IGitt and GitMate *(Contributor, 2016)* —Contributed bug fixes and new feature to predict bugs' rank in GitMate —an automated code review and issue triaging platform for GitHub projects.