

## EDUCATION

### University of Colorado Boulder

MS, Computer Science | GPA: 4.0

(focus on Intelligent Systems)

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)

- JavaScript | TypeScript | NodeJS
- Python • Rust • C++

(Development | Automation)

- Ansible • Docker • Kubernetes
- Git • Linux • GraphQL
- Airflow • Test Automation • PyTorch

(Database)

- InfluxDB • MongoDB • MySQL
- 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 a contemporary 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