

Mayank Kataruka

mkataruk@asu.edu || mayank.kt10@gmail.com || 480-685-0953 || <http://github.com/mayankkt9> || [linkedin.com/in/mayankkt9/](https://www.linkedin.com/in/mayankkt9/) || sourcer.io/mayankkt9

Education

- | | |
|--|--------|
| MS in Computer Software Engineering, Arizona State University, Aug 2019 – May 2021
<i>Graduate Student Assistant for Foundation of Software Engineering</i> | 3.9/4 |
| Bachelor of Technology in Computer Science, Heritage Institute of Technology, Jul 2013 – Jul 2017 | 8.1/10 |

Professional Experience

SDE Intern, Amazon, Seattle, US, May 2020 - Aug 2020

- Demand Forecasting team that runs machine learning experiments to forecast products in supply chain cycle.
- Built Experiment Tracker, tracking each experiment, hyperparameters & configs using AWS SageMaker, EMR, S3, AWS API, Scala.
- Reduced employee hour immensely spent in tracking experiments, configs and hyperparameters.

SDE, Ribbon Communication, Bangalore, India, Jul 2017 - Jul 2019

Application Development: Codebase – Shell, Perl, Java, C/C++, Perl, VCS - git

- Worked on SBC Product, built features, resolved customer issues involving real-time network SIP call scenarios, OS & DB issues.
- Reduced memory corruption, leaks by **30%**, resolved performance, load scenarios – good hold on in-depth **debugging skills**.
- Built serialization tool used for **critical P1 issues**, OS upgrade and Perl scripts that automate tasks such as finding all static memory corruption (coverity) issues before every release and assigning it to a specific developer, **helping smooth releases**.

Platform Development:

- Migrated Operating System for the product from Suse Linux to Centos, more security-hardened product.
- Owned the responsibility in full application installation and upgrade on top of migrated CentOS.

Open Source Contribution – Microsoft vcpkg, Google Chrome web.dev, Apache dubbo

Academic Projects

- **Rancho** - Developed new Programming Language & Compiler using Prolog.
- **Geo-Spatial Query** - Determine hot-zone, top pick up location from 1B record in New York. Apache Spark, Hadoop, Scala.
- **Path Finding Visualization** - Visualizing A*, BFS, DFS using Swing AWT and JAVA.
- **Recommendation Engine** - Recommend movies using matrix factorization, SVD, KNN, Neural Collaborative filtering.
- **COVID-19** - Track COVID – 19 outbreaks for all countries. Python, Django.
- **Tweet Analysis** - Visualize trending tweets using Kafka and Spark Streaming.
- **Face Recognition Chat** - HOG - face detection, Face Landmark estimation, Open Face - face recognition, Node.js, Mongo DB.
- **Data Visualization** - Visualize Gmail inbox traffic analysis over time with millions of data categorized.
- **Foodex** - Android Application for an office environment for ordering cafeteria food from desk, both client and server. Firebase.
- **Augmented Reality Sudoku** - Open the web-cam, show sudoku grid, get the solution.
- **Alexa Skill** – Help pre-onboarding intern with reminders and leadership principle.

Technical Skills

- **Problem Solving skills: Data Structures and Algorithm**
- **Language/Scripting/DB:** Java, C, Scala, JS, Shell, Perl, MySQL, Oracle, PL-SQL, Postgres, Mongo DB
- **Web-dev & frameworks:** .NET, PHP, JSP, Servlet, JDBC, NodeJS, Socket.io, Spring, Flask, html, CSS, ajax, jQuery, REST
- **Tools:** Wireshark, Android Studio, Eclipse, Visual Studio, Maven, Gradle, cscope, ctags, git, Putty, JIRA
- **AWS:** EC2, S3, RDS, RedShift, DynamoDB, SageMaker, EMR, Athena, Glue, CloudWatch, Kinesis
- **Data Science and Machine Learning Skills :** Python, Data Visualization, K means, Classification, Regression, Probability, Numpy, Pandas, matplotlib, SVD.

Certification & Achievement

- Rank 1 all over India for the best Web Development project while training from Globsyn 2016.
- Dream Team award and Faculty Choice award from Globsyn 2016 for JSP Servlet project.
- All India Rank 1 in National Graphic Championship organized by Silver Zone among 2500 schools
- Among top 50 in an online merit contest Aptitude test 2015 consecutively for two years within 200 colleges