Mayank Kataruka

480-685-0953 | mayank.kt11@gmail.com | mkataruk@asu.edu | http://github.com/mayankkt9 | linkedin.com/in/mayankkt9/ | sourcer.io/mayankkt9

Education

Arizona State University, MS in Computer Software Engineering, Aug 2019 – May 2021 (Expected) *Course: Distributed System, Advanced Data Structures Algorithms, Software Design* *TA: Intro to Computer Science, Foundation of Software Engineering.*	**4.0/4.0**
Heritage Institute of Technology, BTech in Computer Science, Jul 2013 – Jul 2017	**8.1/10**

Professional Experience

Amazon, Software Development Engineering Intern, Seattle, WA, US   May 2020 – Aug 2020
- Built Experiment Tracker to track machine learning experiment that recommends products to buy in the supply chain cycle.
- Tracks and visualize jobs, metrics, parameters in SageMaker Studio, **reducing manual employee hours by ~144 per year**.

Ribbon Communication, Software Development Engineer, KA, India   Jul 2017 – Jul 2019
- Worked on Session Border Controller Product involving real-time telecom VOIP call scenarios.
- Built feature named "multiple early dialog", used by more than **70%** of the customers worldwide. **Using C, C++.**
- Reduced memory corruption and leaks by **60%** which increased the product efficiency indirectly. **Strong debugging with gdb**.
- Automated the finding of all static memory issues through scripting which reduced developer time by **6 hours** per feature.
- Built serialization tool that was used for **critical P1 issues** and Operating System upgrade issues.
- **Migrated Operating System** from SUSE Linux to CentOS making the product more **security hardened.**

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

Academic Projects   github.com/mayankkt9
- **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 various algorithms like 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.
- **Foodex** - Android app for an office environment for ordering cafeteria food from desk, both client and server using Firebase.
- **Augmented Reality Sudoku** - Open the web-cam, show sudoku grid, get the solution.

Technical Skills
- **Problem Solving skills:** Data Structures and Algorithm
- **Language/Scripting/DB:** Java, C, Scala, Python, JS, Shell, Perl, MySQL, Oracle, PL-SQL, Postgres, Mongo DB.
- **Web-dev & frameworks:** .NET, PHP, JSP, Servlet, JDBC, NodeJS, Socket.io, Spring, Flask, Junit, Mockito.
- **Tools:** Wireshark, Android Studio, Eclipse, Visual Studio, Maven, Gradle, Jupyter Notebook, Spark, Kafka cscope, git, Putty, gdb.
- **AWS:** EC2, S3, RDS, RedShift, DynamoDB, SageMaker, EMR, Athena, CloudWatch, Kinesis.
- **ML:** Scikit-Learn, Numpy, Pandas, Matplotlib, Data Modelling, Data Cleaning, Data Visualization.

Certification & Achievement & Volunteering
- Ranked 1 all over India among 1200 schools 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.
- Participated in **Alexa Hackathon**, built Alexa skill for onboarding intern helping them with reminder and work simulation.
- Among top 50 in an online merit contest Aptitude test 2014,2015 consecutively for two years within 200 colleges.
- Taught computer and mathematics to more than **100 underprivileged children from 2013-2017**.