# **CHUKKA BHARGAV**

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#### **EDUCATION**

UNIVERSITY OF CALIFORNIA - Irvine, California

Sept 2019 - Mar 2021

M.S. in Computer Science

GPA: 3.95/4

Relevant Coursework: Transactions and Distributed Data Management, Distributed Systems Middleware, Artificial Intelligence, Deep Generative Models, Machine Learning, Data Structures, Fundamentals of Algorithms

INDIAN INSTITUTE OF TECHNOLOGY - Delhi, India

Jul 2012 – May 2016

### B. Tech. in Electrical Engineering

GPA: 7.38/10

Relevant Coursework: Data Structures, Design and Analysis of Algorithms, Computer Architecture, Operating Systems, Computer Networks, Introduction to Database Systems

# **TECHNICAL SKILLS**

Languages: Java(4yrs), C++(2yrs), Python, C, SQL

Other Skills: RESTful Web services, Kafka, SQL Server, Redis, IBM MQ, Rabbit MQ, PostgreSQL, MySQL, Git, Unix,

Spring framework, Maven, F1, BigTable, PyTorch, React JS, Android Development

### WORK EXPERIENCE

# GOOGLE, Mountain View, CA

**Software Engineer,** Google Display Ads: AVID Smart Shopping Campaign [C++]

may 2021 – present

- Worked on an initiative to move away from 3p cookies on the advertiser bidding and ad filtering side of the system
- Built a diff tool at scale that differentiates the response of control and experiment RPC service
- Migrated a Map Reduce job with a big-table storage to use Flume API with a Key-Value storage

### **Software Engineering Intern,** Ads Integrity data Infra [C++]

*Jun 2020 – Sep 2020* 

• Developed a generic and extensible feature to equip Enforcement Manager (Human Investigations tool) users with Ad data insights. Developed a feature to slice business impact analysis on salient terms, which are extracted from the Ad entities filtered by user rule criteria.

# WALMART LABS, Bangalore, India

#### **Software Development Engineer II & III**, Global Integrated Fulfillment [Java]

Aug 2016 - Aug 2019

- Worked on distributed and highly scalable order management system, supporting 6000+ Walmart stores across 4 countries
- Enhanced Order Lifecycle Manager to be consistent with the rest of the system on Disaster. Migrated the microservice to the cloud and modified it to be idempotent
- Developed a Kafka Monitoring Support Tool for Global Markets. The centralized tool supports monitoring consumer groups across kafka clusters, viewing topic records with customer order based filters, automatic and manual replay of messages.
- Designed and Developed an end to end scalable Store Fulfillment System for Walmart stores in India. Worked in a team of two to develop Order Management, Items Enrichment, Pick Route Algorithm, Order Picking services and Picking Application
- Developed JMS wrapper library to ensure load balance on IBM MQ queue managers and avoid single point of failure
- Built a tool to purge orders from various database servers with flexibility of choosing target markets and components
- Developed JMS wrapper library to ensure load balance on IBM MQ queue managers and avoid single point of failure

### SELECTED PROJECTS

<u>Virtual room YouTube streaming</u> [Distributed Systems Middleware] [Java, Redis, HAProxy] <u>Code</u>

May 2020

- Built a highly scalable Virtual room YouTube streaming Web Application. Supports play/pause/reposition playback controls
- Achieved average synchronization error of one tenth second by implementing a server client architecture. Server comprises a cluster of nodes, that are load balanced, fault tolerant and stateless. Used NTP protocol for clock synchronization

Two Phase Commit [Transactions and Distributed Data Management] [Python, PostgreSQL] Code

Mar 2020

• Implemented Two Phase Commit protocol with recovery and timeout handling in Python. ProtocolDB logs are written to PostgreSQL. Communication between Coordinator and Participants is enabled through RabbitMQ messaging broker

# **OTHERS**

### <u>Teaching Assistant</u> [Design and Analysis of Algorithms]

Apr 2020 - Jun 2020

Conducted weekly virtual discussion sessions for 240 undergraduate students. Regularly resolved questions on piazza forum