## Arsheya Raj

araj4@uw.edu | +1 (206) 496-5788 | linkedin.com/in/rajarsheya | github.com/rajarsheya

#### **EDUCATION**

University of Washington Bothell - School of STEM

Bothell, WA

Master of Science in Computer Science and Software Engineering

Expected August 2024

• GPA: 3.90/4.0

• Relevant Coursework: Mobile Computing, Algorithm Design & Analysis, High Performance Computing, Evaluating Software Design, Software Management, Adv. Topics in Computer Vision

Birla Institute of Technology Mesra

Ranchi, Jharkhand, India

**Bachelor of Engineering in Information Technology** 

June 2018

• GPA: 3.82/4.0 (WES ICAP)

#### **TECHNICAL SKILLS**

Programming Languages: C/C++, Java, Python (NumPy, pandas), PostgreSQL, JavaScript, Shell Scripting

Cloud Computing Platforms: Amazon Web Services (AWS), Google Cloud Platform (GCP)

Certifications: Google Cloud Digital Leader Developer

Achievements: Qualified for ACM ICPC Onsite Round and Google Code Jam in 2016 and 2017,

Member at The Society for Collegiate Leadership & Achievement (SCLA)

Technical Skills: Cloud Computing, Mobile Computing, Big Data Analysis, Data Analysis &

Synthesis, NVIDIA CUDA, OpenCV, React Native, React.js

**EXPERIENCE** 

I-Corps Summer Cohort 2023, CoMotion at University of Washington

Freelance App Developer / React Native Developer, Self-Employed

April 2020-April 2022

• Built native Android and iOS Apps using React Native platform, JavaScript, and Google Cloud Platform for video conferencing, video sharing, quiz portal, etc.

• Performed alpha, beta, and closed testing to ensure quality and security of applications.

Contributed to 6 system design specifications for the web app / native app of clients

Identified and resolved 10 critical bugs in client's video sharing react-native app before deployment.

ZS Associates - Contracting Capability Evolution (CCE)

Pune. India

### **Business Technology Analyst**

May 2018-September 2019

- Collaborated with team to build automated and flexible solutions that helped client optimize current profitability and build the foundation to support appropriate risk-based pricing and contracting models
- Delivered releases using AWS Services such as Amazon Redshift, AWS EC2, AWS S3 for backend
- Reduced the run time by 5% by automating the process which ran on the AWS EC2 instances for ETL batch upload using Shell Scripting
- Updated the JARs to automate processes for Master Data Management (MDM) software in Reltio creating a customized action button using Node.js data from multiple sources and display as one.

### **Business Technology Analyst Intern**

Winter 2018

- Developed and designed code in PostgreSQL, ETL, and Data Warehousing in Amazon Redshift
- Presented results and test cases to leadership, clients, and stakeholders.

AllSoft Solutions Pvt. Ltd.

Noida, India

Summer Intern: Big Data

Summer 2017

• Developed proof-of-concept proposal to analyze large datasets for top 10 lists from several categories utilizing Hadoop, HDFS, Map-Reduce, Hive, Pig, and other technologies.

#### TECHNICAL PROJECTS

**Enhanced Vocabulary Trees for Real-Time Object Recognition in Image and Video Streams,** Advanced Topics in Computer Vision Spring 2023

 This project explores the application of hierarchical k-Means clustering trees in the field of computer vision, influenced by the research paper of Nister and Stewenius (CVPR 2006 – Scalable Recognition using Vocabulary Tree).

# K-Means Clustering in CUDA, HPC

Winter 2023

• Implemented the efficient k-means clustering algorithm on the CUDA platform on GPU using threads and blocks.