

Prem Raheja

✉ raheja@ualberta.ca

🌐 prem1409.github.io

🔗 [LinkedIn: premraheja](#)

☎ +1 (873) 339-4497

SUMMARY

- Results-oriented software developer and research professional with 1+ years of industry experience
- Proficient in data analysis, developing and designing software-based architectures
- Created software with the customer centric and applications with a usable and intuitive user experience while working with Quantiphi Analytics
- Researched, synthesized and evaluated technical information and break downs information into manageable components while working on the project "Music is all you need to Analyze Data"
- Constantly striving to learn new technologies and discover techniques to improve myself in this dynamic industry while pursuing Masters in University of Alberta

EDUCATION

Masters in Computing Science, Multimedia Specialization

Sep. 2019 – Dec. 2020

[University of Alberta](#), Edmonton, Canada

CGPA: 4.0/4.0

Relevant Coursework: Multimedia Communications, Artificial Intelligence, Image and Video Processing, Virtual Reality and Telepresence, Computer Vision

Bachelor of Engineering, Information Technology Specialization

June. 2014 – May. 2018

[Sardar Patel Institute of Technology](#), Mumbai, India

CGPA: 8.6/10

Relevant Coursework: Software Engineering, Database Management System, Cloud Computing

SKILLS

Programming Languages	: Python, Java
Machine Learning Libraries	: Pandas, Scikit-Learn, Pytorch, Keras, Numpy, Matplotlib
Database	: MySQL, MongoDB, DynamoDB, Neo4j
Cloud Platform	: Google Cloud Platform, Amazon Web Services
Framework	: Django, Flask, Native Mobile Development
Tools	: Visual Studio, Eclipse, Git, Anaconda, Sublime Text, Notepad++

WORK EXPERIENCE

Cloud Platform Engineer Intern

May. 2020 – Dec. 2020

[Royal Bank of Canada](#), Toronto, Canada

- Managing Elastic Cloud Enterprise (Elasticsearch and Kibana) and Apache Kafka Platforms deployed on private cloud using Ansible as Configuration Management tool
- Providing ECE and Kafka as a Service to 70+ internal RBC's application teams
- Provisioned Concourse pipeline as a build tool for executing various Ansible and Python scripts used for maintaining the platform
- Created an automation tool to update the patching server based on the requirement of 120 servers
- Contributing to document major scripts, How Tos and improving Git branching strategy

Software Developer

July. 2018 – Aug. 2019

[Quantiphi Analytics Solution Private Limited \(Athenas Owl\)](#), Mumbai, India

- Designed and developed a file management system using REST APIs which manages 10 TB of storage, file naming, metadata of files/folders on top of Google Compute Engine and MongoDB using Python
- Designed and developed an automated process for pre-workflow pipeline that identifies the type of input and other hyper-parameters required by the workflows
- Defined, developed, and evolved software in a fast paced and agile development environment using latest software development methods and infrastructure
- Collaborate with a scrum team of 20 consisting of system engineers, data scientists, and software developers to implement solutions that are aligned with extend shared platforms and solutions

Mobile App Developer Intern

May. 2017 – July. 2017

Legal Desire Media and Insights India, Mumbai, India

- Architected and developed Legal Desire Android application for phones, tablets.
- Designed and developed a user management system which manages storage, maintaining user sessions and storing the credentials using hashing in a waterfall development environment
- The main aim of the application was to inform common people about the various legal services that the company provides and latest legal news

PROJECTS**Online Video Streaming Mechanism with Servers Deployed Over Cloud**

Jan. 2020 – April. 2020

- Created a technique to balance the traffic for serving multiple users without delay in spite of all the computation power required by video transcoding
- Optimized the Quality of Experience (QoE) by considering dynamic adaptive video streaming techniques
- Reduced the load on the server's workload by designing a container based architecture

Music is all you need to Analyze Data

Sep. 2019 – Dec. 2019

- Engineered a LSTM based architecture that would help visually impaired people to analyze data through music generated by the model using Python and PyTorch
- Conducted an online survey where 69% of the participants were able to match the generated audio with the correct trajectory proving the favourable outcome of the project
- Self-managed workflow in fast paced environment that required attention to details and adherence to strict deadlines

Task Specific Image Enhancement

Sep. 2019 – Dec. 2019

- Developed an Image Pyramid Technique as well as a deep learning model using Generative Adversarial Network (GANs) to dehaze the image for better resolution assisting surveillance applications
- Obtained results were then passed through a fixed object detector improving its performance by 8.5%
- Demonstrated the project results to subject Professor and Director of the Program and created a project report summarizing the entire research

SELECTED PUBLICATIONS

- Color Balanced Histogram Equalization for Image Enhancement
- Mapping Urban Ecosystem Services Using Synthetic-Aperture Radar (SAR) Images from Satellite Data for Rural Microgrids in India
- Knowledge discovery, analysis and prediction in healthcare using data mining and analytics

AWARDS

- Awarded from University of Alberta for Painting in 3D environment using Virtual Reality (VR)
- Awarded with **Ace of Initiative** and **One for All Award** while working with Quantiphi Analytics Solution Pvt. Ltd for my out-of-the-box thinking and problem solving skills
- Awarded with **Best Project Award** for Academic Year 2018 for high design sensibility, creativity and initiative for

Volunteering and Leadership Experience

- Conducted and managed team celebrations, team outings for 1 year attended by up to 150 people
- Conducted 5 seminars on self-learned data analytical tools attended by 20 colleagues in each session
- **Chairperson of student committee**, managing various technical workshops, treks, Industrial visits for upto 240 undergrad students
- Organized a national level Hackathon in collaboration with Computer Society of India (CSI) Mumbai Chapter which was attended by 100 teams
- Arranged and conducted **technical workshops** for other 60 undergrads for increasing their domain knowledge